



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MAR 09 2007

MIKE D. McDANIEL, Ph.D.

SECRETARY

CERTIFIED MAIL 7003 2260 0005 9326 8672

Mr. Paul Miller
Cleco Power, LLC.
P.O. Box 5000
Pineville, LA 71360

RE: Notice of Technical Completeness
Cleco Power, LLC. - Rodemacher Power Station
Unit 2 Metal Cleaning Waste Pond/ Bottom Ash Pond/ Fly Ash Pond
AI# 2922/ P-0005/ GD-079-0390/ PER 20000005
Rapides Parish

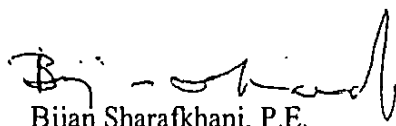
Dear Mr. Miller,

The Waste Permits Division is in receipt of your finalized copies of your submittal dated September 26, 2006. After reviewing this submittal, we have determined that your permit renewal is technically complete and ready for public review.

The Environmental Assistance Division will distribute copies of your application for public review and place public notices in the appropriate newspapers in accordance with LAC 33:VII.513.F.3. Please contact Soumaya Ghosn at (225) 219-3276 for the date of publication and the dates of public comment period. At the conclusion of the comment period, the Waste Permits Division will consider all comments and a decision will be made regarding your application.

Please reference your Agency Interest Number (AI# 2922), Permit Number (P-0005), Site Identification Number GD-079-0390, and Permit Activity Number (PER 20000005) on all future correspondence pertaining to this facility. If you have any questions concerning this matter, please contact Ms. Kenya Gillingham of the Waste Permits Section at (225) 219-3139.

Sincerely,


Bijan Sharafkhani, P.E.
Administrator
Waste Permits Division

kg

c: Lucy Hubenak, OES

ENVIRONMENTAL SERVICES
: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
WWW.DEQ.LOUISIANA.GOV

RECEIVED

SEP 25 2006

LDEQ
E·A·G·L·E
 ENVIRONMENTAL SERVICES, INC.

18369 Petroleum Drive • Baton Rouge, Louisiana • 70809

Ph. (225) 757-0870 • Fax (225) 757-8855

www.eaglered.com

COPYoriginal to IOSW
 Sm
 copy to SW/GI/Townsel
 AVG

September 25, 2006

Louisiana Department of Environmental Quality
 Office of Environmental Services
 Post Office Box 4313
 Baton Rouge, Louisiana 70821-4313
 Ms. Kenya Gillingham
 Water and Waste Permits Division

Re: Final Copies for
 Solid Waste Permit Renewal Application
 Generator ID No. GD-079-0390
 Permit Nos. P-0005, P-0027, P-0062
 ✓ Agency Interest Number 2922
 Cleco Power LLC – Rodemacher Power Station,
 Boyce, Louisiana

Dear Ms. Gillingham:

On behalf of our client, Cleco Power, LLC, Eagle Environmental Services, Inc. (Eagle), has prepared the attached six Final Copies of the Solid Waste Permit Renewal Applications for three solid waste permits for the Rodemacher Power Station. The Louisiana Department of Environmental Quality (LDEQ) requested the submittal of the Final Copies of the solid waste permit applications of three permitted facilities in correspondence dated June 16, 2006, and was received on June 23, 2006. The solid waste permitted facilities located at the facility that received this request are listed below:

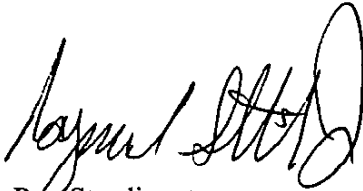
- Unit 2 Metal Cleaning Waste Pond, Bottom Ash Pond, Fly Ash Pond (P-0005);
- Unit 1 Metal Cleaning Waste Pond (P-0027); and
- Coal Sedimentation Pond (P-0062).

Cleco also has a solid waste permit (P-0379) for the Ash Management Area at the Rodemacher Power Station.

Ms. Kenya Gillingham
September 25, 2006
Page 2

If you should have any questions or comments, please contact Mr. Charlie VanHoof of Cleco at 318/484-7632 or our office at 225/757-0870.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ray Sturdivant', with a large, stylized flourish at the end.

Ray Sturdivant

cc: Charlie VanHoof, Cleco Power, LLC
Ricky Nguyen, Cleco Power, LLC
Bijan Sharafkhani, LDEQ Water and Waste Permits Division
David McQueen, LDEQ Northeast Regional Office
Jonathan McFarland, LDEQ, Environmental Technology Division

**CLECO POWER, LLC
RODEMACHER POWER STATION
BOYCE, LOUISIANA**

**AGENCY INTEREST No. 2922
GD-079-0390**

**UNIT 2 METAL CLEANING WASTE POND,
BOTTOM ASH POND, AND FLY ASH POND
SOLID WASTE STANDARD PERMIT
RENEWAL APPLICATION
PERMIT No. P-0005**

September 2006

CLECO POWER, LLC
RODEMACHER POWER STATION
BOYCE, LOUISIANA

AGENCY INTEREST No. 2922
GD-079-0390

UNIT 2 METAL CLEANING WASTE POND,
BOTTOM ASH POND, AND FLY ASH POND
SOLID WASTE STANDARD PERMIT
RENEWAL APPLICATION
PERMIT No. P-0005

September 2006

Prepared By:

Eagle Environmental Services, Inc.
18369 Petroleum Drive
Baton Rouge, Louisiana 70809
(225) 757-0870

Eagle Project No. 01-0022

***Cleco Power LLC
Rodemacher Power Station***

***Permit P-0005
Solid Waste Standard Permit Application***

TABLE OF CONTENTS

<u>Section</u>	<u>Page No.</u>
1.0 INTRODUCTION	1
2.0 LAC 33:VII.519. PART I: PERMIT APPLICATION FORM	3
3.0 LAC 33:VII.521. PART II: SUPPLEMENTAL INFORMATION, ALL PROCESSING AND DISPOSAL FACILITIES	5
4.0 LAC 33:VII.523. ADDITIONAL SUPPLEMENTARY INFORMATION	39

LIST OF FIGURES

Figure

- 1 SITE LOCATION MAP
- 2 FACILITY MAP
- 3 100-YEAR FLOOD PLAIN
- 4 2004 AERIAL PHOTOGRAPH
- 5 LPDES DISCHARGE OUTFALLS

LIST OF APPENDICES

Appendix

- A CORRESPONDENCE
- B CENSUS INFORMATION
- C WATER WELL DATA
- D OPERATIONAL ENVIRONMENTAL COMPLIANCE HANDBOOK
- E EMERGENCY RESPONSE MANUAL
- F REGIONAL GEOLOGIC AND HYDROGEOLOGIC DATA
- G GEOLOGIC CROSS SECTIONS AND ISOMETRIC SOIL PROFILES
- H HISTORICAL GEOLOGIC DATA
- I SOIL BORING LOGS AND MONITORING WELL CONSTRUCTION DIAGRAMS
- J GROUNDWATER FLOW EVALUATION
- K ENGINEERING DATA
- L GROUNDWATER SAMPLING AND ANALYSIS PLAN
- M CLOSURE PLAN
- N FINANCIAL ASSURANCE AND ANNUAL REPORT

1.0 INTRODUCTION

Cleco Power, LLC (Cleco) owns and operates an electric utility power station known as the Rodemacher Power Station (RPS) located near Boyce, Rapides Parish, Louisiana; the site identification number for RPS is *GD-079-0390*.

As mandated by Title 33, Part VII, Chapter 5 of the Louisiana Administrative Code (LAC 33:III.Chapter 5), Cleco has prepared a standard solid waste permit application for submittal to the LDEQ to continue operation of the solid waste facility. This application addresses all requirements of the LDEQ's Solid Waste Permitting program under Subchapter C of LAC 33:VII.Chapter 5. This application has been prepared in a citation-response format. Each regulatory citation is presented in bold face and the response to the citation in normal typeface. Regulatory citations not applicable to this permit application are indicated as such and a rationale is presented as to why the section is not applicable. Supporting documentation is included as tables, figures, exhibits, and appendices. Referenced items are identified and included sequentially in the order in which they are referenced. The application specifically addresses in Section 2.0 through Section 4.0 the standards of the LDEQ's Solid Waste Regulations listed below.

- Section 2.0: §519.Part I: Permit Application Form
- Section 3.0: §521.Part II: Supplementary Information, All Processing and Disposal Facilities
- Section 4.0: §523.Part III: Additional Supplementary Information

As required under LAC 33:VII.519, the Solid Waste Standard Permit Application – Part I form, as contained in *Appendix B* of LAC 33:VII.3003, has been prepared and included in the application document prior to the regulatory responses. The Addendum to Permit Applications per LAC 33:I.1701 (Form 1701), as required under LAC 33:VII.520, is provided in this application prior to the regulatory responses. Financial assurance information has been provided within the appropriate responses to LAC 33:VII.521 (Section 3.0) and addresses the required information of LAC 33:VII.727.

1.1 FACILITY DESCRIPTION

Permit P-0005 includes the Unit 2 Metal Cleaning Waste Pond, the Fly Ash Pond, and the Bottom Ash Pond. The Unit 2 Metal Cleaning Waste Pond receives metal cleaning wastes from the Unit 2 and 3 boilers and related equipment, miscellaneous water plant metal cleaning waste, and occasional boiler blowdown. The Fly Ash Pond receives dry fly ash from the precipitators for storage prior to

sale or reuse. The Bottom Ash Pond receives bottom ash, oily fly ash, economizer ash, pyrites from the hoppers, and other non-hazardous solid waste such as spill clean-up waste on a case-by-case basis. Water from the boiler sump is also pumped to this pond.

1.2 WASTE CHARACTERIZATION

The types of materials handled by the facilities will be non-hazardous, on-site-generated materials only. The material consists of boiler cleaning waste, air heater waste, and turbine cleaning waste, and miscellaneous water plant metal cleaning waste in the Unit 2 Metal Cleaning Waste Pond; fly ash, abrasives, and sodium carbonate in the Fly Ash Pond, and bottom ash, pyrites, sluice & sump water, resin beads, and fly ash pond effluent in the Bottom Ash Pond. None of the materials disposed are characteristic or listed hazardous wastes as defined by LAC 33:V.Subpart 1 or by federal regulations (this is confirmed by process knowledge of each waste).

1.3 EXISTING ON-SITE SOLID WASTE FACILITIES

There are four permitted solid waste disposal facilities currently operating at the RPS, as identified below.

<u>Permit Number</u>	<u>Facilities</u>
P-0005	Unit 2 Metal Cleaning Waste Pond Bottom Ash Pond Fly Ash Pond
P-0027	Unit 1 Metal Cleaning Waste Pond
P-0062	Coal Sedimentation Runoff Pond
P-0379	Ash Management Area

The Ash Management Area, Permit P-0379, is adjacent to the Fly Ash Pond and Bottom Ash Pond and is under construction within the same area identified in the Army Corps of Engineers permit of 1977. Information relating to that facility may be referenced within this application (i.e., soil borings, soil classifications, subsurface hydrology, etc.) as the information is pertinent to this application due to their adjacent location. In addition, Cleco has implemented a unitized groundwater monitoring program that addresses all of the existing solid waste facilities.

2.0 LAC 33:VII.519. PART I: PERMIT APPLICATION FORM

The applicant shall complete a standard permit application Part I Form (LAC 33:VII.3003). The following subsections refer to the items on the form requiring that information:

- A. name of applicant (prospective permit holder) applying for a standard permit;**
- B. facility name;**
- C. description of the location of the facility (identify by street and number or by intersection of roads, or by mileage and direction from an intersection);**
- D. geographic location (section, township, range, and parish where the facility is located, and the coordinates [as defined by the longitude and latitude to the second] of the centerpoint of the facility);**
- E. mailing address of the applicant;**
- F. contact person for the applicant (position or title of the contact person is acceptable);**
- G. telephone number of the contact person;**
- H. type and purpose of operation (check each applicable box);**
- I. status of the facility (if leased, state the number of years of the lease and provide a copy of the lease agreement);**
- J. operational status of the facility;**
- K. total site acreage and the amount of acreage that will be used for processing and/or disposal;**
- L. list of all environmental permits that relate directly to the facility represented in this application;**
- M. a letter attached from the Louisiana Resource Recovery and Development Authority (LRRDA) stating that the operation conforms with the applicable statewide plan; (Note: In accordance with R.S. 30:2307.B, this regulation does not apply to solid waste disposal activity occurring entirely within the boundaries of a plant, industry, or business which generates such solid waste);**
- N. zoning of the facility (if the facility is zoned, note the zone classification and zoning authority, and include a zoning affidavit or other documentation stating that the proposed use does not violate existing land-use requirements);**

***Cleco Power LLC
Rodemacher Power Station***

***Permit P-0005
Solid Waste Standard Permit Application***

- O.** types, maximum quantities (wet tons/week), and sources (percentage of the on-site or off-site-generated waste to be received) of waste to be processed or disposed of by the facility;
- P.** indicate the specific geographic area(s) to be serviced by the solid waste facility;
- Q.** attach proof of publication of the notice regarding the submittal of the permit application as required in LAC 33:VII.513.A;
- R.** provide the signature, typed name, and title of the individual authorized to sign the application. Proof of the legal authority of the signatory to sign for the applicant must be provided; and
- S.** any additional information required by the administrative authority.

The information required under LAC 33:VII.519 is provided in the Solid Waste Standard Permit Application – Part I form, as contained in *Appendix A* of LAC 33:VII.3003. A copy of the form is attached. As required under LAC 33:VII.3003.Appendix A, the form was completed in accordance with the instructions in LAC 33:VII.513.A.1.

SOLID WASTE STANDARD PERMIT APPLICATION - PART I

(The form shall be completed in accordance with the instructions found in LAC 33:VII.513.A.1)

A. Applicant (Permit-Holder) Cleco Power, LLC Rodemacher Power Station

B. Facility Name: Unit 2 Metal Cleaning Waste Pond, Fly Ash Pond, Bottom Ash Pond

C. Facility Location/Description: 275 Rodemacher Road, Lena, LA 71477

D. Location: Sections 24, 25, 78, 80 Township 5 N Range 3 W

Parish Rapides

Coordinates: Latitude – Degrees 31° Minutes 23' Seconds 42"

Longitude – Degrees 92° Minutes 43' Seconds 00"

E. Mailing Address: 275 Rodemacher Road, Lena, LA 71447

F. Contact: Robert St. Romain, Plant Manager

G. Telephone: (318) 793-1135

H. Type and Purpose of Operation: (check each applicable line)

Type I

Industrial Landfill _____
Industrial Surface Impoundment X
Industrial Landfarm _____

Type I-A

Industrial Incinerator Waste Handling Facility _____
Industrial Shredder/Compactor/Baler _____
Industrial Transfer Station _____

Type II

Sanitary Landfill _____
Residential/Commercial Surface Impoundment _____
Residential/Commercial Landfarm _____

Type II-A

Residential/Commercial Incinerator Waste Handling Facility _____

Residential/Commercial Shredder/Compactor/Baler _____

Residential/Commercial Transfer Station _____

Residential/Commercial Refuse-Derived Fuel _____

Type III

Construction/Demolition-Debris Landfill _____

Woodwaste Landfill _____

Compost Facility _____

Resource Recovery/Recycling Facility _____

Other

Describe _____

I. Site Status: Owned X Leased _____ Lease Term Years

(Note: If leased, provide copy of lease agreement)

J. Operation Status: Existing X Proposed _____K. Total Acreage 6000 Processing Acreage _____ Disposal Acreage 68.5

L. Environmental Permits: (List)

 LPDES LA008036

M. Conformity with regional plans. Attach letter from the Louisiana Resource Recovery and Development Authority (LRRDA) stating that the facility is an acceptable part of the state-wide program.

(Note: La. R.S. 30:2307.(b), LRRDA was repealed by Acts 2001, No.524.

N. Zoned: Yes No X Zoning Requested _____ Zone Classification _____

(Note: If zoned, include zoning affidavit and/or other documentation stating that the proposed use does not violate existing land-use requirements.)

O. Types, Quantities, and Sources of Waste:

	Processing		Disposal	
	Onsite	Offsite	Onsite	Offsite
Residential				
Industrial			See Attached.	
Commercial				
Other				

P. Service Area:

List of Parishes: This facility only receives waste generated at the Cleco Power, LLC Rodemacher Power Station.

Statewide

Unlimited

Q. Proof of Operator's Public Notice - Attach proof of publication of the notice regarding the permit application submittal as required by LAC 33:VII.513.A.
Attached.

R. Certification: I have personally examined and am familiar with the information submitted in the attached document, and I hereby certify under penalty of law that this information is true, accurate, and complete to the best of my knowledge. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment.

Signature Steve M. CarterDate 22 SEP 2006Typed Name and Title Steve Carter, Vice-President - Regulated Generation

(Note: Attach proof of the legal authority of the signee to sign for the applicant.)

§520. Compliance Information

A. All applicants for solid waste permits shall comply with the requirements of LAC 33:I.1701.

The completed 1701 Form and supporting documentation are attached.


UNIT 2 METAL CLEANING WASTE POND	
FACILITY AND COMPONENTS	QUANTITY OF WASTES *
Boiler Cleaning Waste	Max 625,000 gallons during boiler cleaning operation every 3 to 5 years, per unit as needed
Air Heater Waste	Approximately 500,000 gallons/year, 1 to 4 times/year, per unit as needed
Turbine Cleaning Waste	20,000 gallons, as needed
Miscellaneous Water Plant Metal Cleaning Waste	2,000 gallons, as needed
Boiler blowdown	0 to 150,000 gallons, as needed
FLY ASH POND	
FACILITY AND COMPONENTS	QUANTITY OF WASTES
Fly Ash	85,309 tons/year Max. rate 41,046 lbs/hr
Abrasives	Estimated 6 tons/year
Sodium Carbonate (tank bottoms)	Approximately 6 tons/year
Neutralized wastes	Approximately 2 tons/year, as needed
BOTTOM ASH POND	
FACILITY AND COMPONENTS	QUANTITY OF WASTES
Bottom Ash	21,331 tons/year Max. rate 10,261 lbs/year
Pyrites	1,160 tons/year
Sluice and Sump Water	1.56 MGD
Resin Beads	Approximately 30 cubic yards/year
Fly Ash Pond Effluent	Approximately 0.086 MGD (when pumping)
Neutralized wastes	Approximately 2 tons/year, as needed
Miscellaneous non-hazardous solid waste	Case-by-case basis

* The power station currently evaporates the boiler cleaning waste in the boiler after collection in frack tanks. Should this authorization change, the waste would again be managed in the impoundment.

Media Type (check one)

Hazardous Waste ☐ Air ☐
 Solid Waste ☒ Water ☐
 Radiation Licensing ☐

Agency Interest Number: 2922

Department of Environmental Quality Permits Division P.O. Box 82135 Baton Rouge, LA 70884- 2135 (225) 765-0219	Addendum to Permit Applications Per LAC 33:I.1701																	
Please Type Or Print	<table border="1"> <tr> <td colspan="2">Company Name</td></tr> <tr> <td colspan="2">Cleco Power, LLC</td></tr> <tr> <td colspan="2">Parent Company (if Company Name given above is a division)</td></tr> <tr> <td colspan="2">Cleco Corporation</td></tr> <tr> <td colspan="2">Plant name (if any)</td></tr> <tr> <td colspan="2">Rodemacher Power Station</td></tr> <tr> <td>Nearest town</td><td>Parish where located</td></tr> <tr> <td>Lena</td><td>Rapides</td></tr> </table>	Company Name		Cleco Power, LLC		Parent Company (if Company Name given above is a division)		Cleco Corporation		Plant name (if any)		Rodemacher Power Station		Nearest town	Parish where located	Lena	Rapides	For Permits Division Use Only
Company Name																		
Cleco Power, LLC																		
Parent Company (if Company Name given above is a division)																		
Cleco Corporation																		
Plant name (if any)																		
Rodemacher Power Station																		
Nearest town	Parish where located																	
Lena	Rapides																	

Use attachments to provide the required information. "NA" is not an acceptable answer. If a particular section does not apply to you, explain why.

1. Please provide a list of the states where you as applicant* have federal or state environmental permits identical to, or of a similar nature to, the permit for which you are applying. **See Attachment 1.**

* This requirement applies to all individuals, partnerships, corporations, or other entities who own a controlling interest of 50% or more in your company, or who participate in the environmental management of the facility for an entity applying for the permit or an ownership interest in the permit.

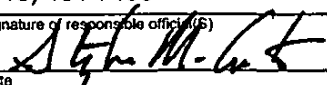
2. Do you owe any outstanding fees or final penalties to the Department? No ☒ Yes ☐ If yes, please explain. **See Attachment 1.**
3. Is your company a corporation or limited liability company? No ☐ Yes ☒ If yes, attach a copy of your company's Certificate of Registration and/or Certificate of Good Standing from the Secretary of State. **See Attachments 1 and 2.**

Certification:

I certify, under provisions in Louisiana and United States law which provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information contained in this Addendum to the Permit Application, including all attachments thereto are true, and complete.

Responsible Official

Name	Stephen M. Carter
Title	Vice- President, Regulated Generation
Company	Cleco Power, LLC
Suite, mail drop, or division	NA
Street or P.O. Box	P.O. Box 5000

City	Pineville	State	LA	Zip	71361
Business phone					
(318) 484-7400					
Signature of responsible official(s)					
					
Date					
22 SEP 2006					

The Department may require the submission of additional information if it deems such information necessary.

ATTACHMENT 1
ADDENDUM TO PERMIT APPLICATIONS
PER LAC 33:1.1701

ATTACHMENT 1

Addendum to Permit Applications per LAC 33:I.1701

1. Please provide a list of the states where you as a applicant* have federal or state environmental permits identical to, or of a similar nature to, the permit for which you are applying.

Cleco Power, LLC does not have any environmental permits in any states other than Louisiana.

2. Do you owe any outstanding fees or final penalties to the Department? If so, please explain.

Cleco Power, LLC does not owe any fees or penalties to the Louisiana Department of Environmental Quality.

3. Under laws of the state of Louisiana, are you required to register with the Secretary of State? If required to do so, are you registered with the Secretary of State? Please provide proof of registration.

Cleco Power, LLC is required to register with the Louisiana Secretary of State. A copy of Cleco Power, LLC's certification of registration is located in Attachment 2.

*This requirement applies to all individuals, partnership, corporations, or other entities who own a controlling interest if 50% or more in your company, or who participate in the environmental management of the facility for an entity applying for the permit or an ownership interest in the permit.

ATTACHMENT 2

**ADDENDUM TO PERMIT APPLICATIONS
PER LAC 33:I.1701**

CERTIFICATE OF REGISTRATION

United States of America State of Louisiana



As Secretary of State, Al Ater, I do hereby Certify that

CLECO CORPORATION

A corporation domiciled in PINEVILLE, LOUISIANA,

Filed charter and qualified to do business in this State on
October 30, 1998,

I further certify that the records of this Office indicate
the corporation has paid all fees due the Secretary of
State, and so far as the Office of the Secretary of State is
concerned is in good standing and is authorized to do
business in this State.

I further certify that this Certificate is not intended to
reflect the financial condition of this corporation since
this information is not available from the records of this
Office.

In testimony whereof, I have hereunto set
My hand and caused the Seal of my Office
To be affixed at the City of Baton Rouge on,
September 19, 2006

Handwritten signature of Al Ater.

Secretary of State
34702181D



Certificate ID: 20060919004054

To validate this certificate, visit the following web site,
go to **Commercial Division, Validate Certificate**, then
follow the instructions displayed.
www.sos.louisiana.gov

CONSULTANT'S AUTHORIZATION

Cleco Power, LLC, Rodemacher Power Station, Boyce, Louisiana, hereby authorizes Eagle Environmental Services, Inc., Baton Rouge, Louisiana (Eagle), to serve as environmental consultant to and representative of Cleco Power, LLC. Eagle is further authorized to submit documents on behalf of Cleco Power, LLC and to act as Cleco's agent in that regard.

Cleco Power, LLC


A handwritten signature in black ink, appearing to read "Steve Carter", is written over a horizontal line.

Steve Carter
Vice-President, Regulated Generation

CERTIFICATION OF COMPLIANCE

I certify under penalty of law that I have personally examined and I am familiar with the information submitted in this permit application and that the facility as described in this permit application meets the requirements of the Solid Waste Rules and Regulations. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

Cleco Corporation



Steve Carter
Vice President – Regulated Generation

22 SEP 2006

Date


PROOF OF LEGAL SIGNATORY AUTHORITY

WHEREAS certain federal and state environmental law require certain permit applications, reports, or other documents to be executed on behalf of a corporation by a Principal Corporate Officer or by an official having significant policy or decision-making responsibility:

and

WHEREAS the Plant Manager in the responsible charge of Cleco Power, LLC, Rodemacher Power Station, Boyce, Louisiana, is an official having significant policy and decision-making responsibilities within the Company:

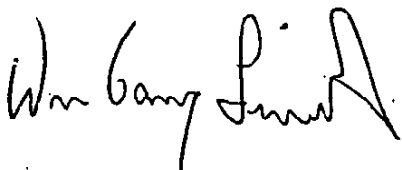
NOW, THEREFORE, I, Stephen M. Carter, Vice-President – Regulated Generation, of Cleco Power, LLC, on this 22 day of September, 2006, do hereby Authorize the Plant Manager of Cleco Power, LLC, Rodemacher Power Station, Boyce, Louisiana, to execute any such permit applications, reports, and other documents on behalf of Cleco Corporation.


Signature

**APPENDIX D
CERTIFICATION**

On behalf of M.S. Environmental Consultants, I, Wm. Gary Smith, P.E., make this certification as a registered Professional Engineer, Licensed in Louisiana. This certification is for an amended application to the Louisiana Department of Environmental Quality for a Solid Waste Disposal Permit. This application is for surface impoundments at Rodemacher Power Plant and is submitted by Central Louisiana Electric Company, Inc.

I certify under penalty of law that I have personally examined and I am familiar with the information submitted in this amended permit application. In accordance with the original certification, the facility as described in this amended permit application meets the requirements of the Solid Waste Rules and Regulations. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

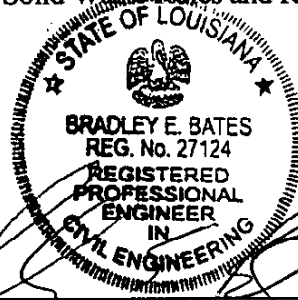


Wm. Gary Smith, P.E.
Louisiana Registration No. 16653



ENGINEERING CERTIFICATION

I certify, based on my review of this permit document and the attached plans and figures, that this application for renewal of the Solid Waste Permit is in agreement with the plans, specifications, and operations as originally submitted for the Unit 2 Metal Cleaning Waste Pond, Fly Ash Pond, and Bottom Ash Pond at the Cleco Power, LLC Rodemacher Power Station. I have found that the facility meets the requirements outlined in the Louisiana Solid Waste Rules and Regulations.



Bradley E. Bates
Professional Engineer

Date 9/20/06 Registration No. 27124 State LA

3.0 LAC 33:VII.521. PART II: SUPPLEMENTARY INFORMATION, ALL PROCESSING AND DISPOSAL FACILITIES

The following information is required in the permit application for solid waste processing and disposal facilities. All responses and exhibits must be identified in the following sequence to facilitate the evaluation. Additionally, all applicable sections of LAC 33:VII.Chapter 7 must be addressed and incorporated into the application responses. If a section does not apply, the applicant must state that it does not apply and explain why.

- A. Location Characteristics.** Standards pertaining to location characteristics are contained in LAC 33:VII.709.A (Type I and II facilities), LAC 33:VII.717.A (Type I-A and II-A facilities, and LAC 33.719.A (Type III facilities).

- 1. The following information on location characteristics is required for all facilities:**

- a. Area Master Plans.** A location map showing the facility, road network, major drainage systems, drainage-flow patterns, location of closest population center(s), location of the public-use airport(s) used by turbojet aircraft or piston-type aircraft, proof of notification of affected airport and Federal Aviation Administration as provided in LAC 33:VII.709.A.2, location of the 100-year flood plain, and other pertinent information. The scale of the maps and drawings must be legible, and engineering drawings are required.

A site location map containing the information required by this regulation is provided as Figure 1. A map of the Rodemacher Power Station is included as Figure 2. The 100-year flood plain is specifically identified in Figure 3. Proof of notification of an affected airport and Federal Aviation Administration under LAC 33:VII.709.A.2 is not required as the application is for a Type I facility that will handle only nonputrescible solid waste.

The facilities will be accessible at all times by all-weather roads that will meet the demands of the facility and the roads are constructed to avoid congestion, sharp turns, obstructions, or other hazards conducive to accidents. All roads are adequate to withstand the weight of transportation vehicles.

- b. A letter from the appropriate agency or agencies regarding those facilities receiving waste generated off-site, stating that the facility will not have a significant adverse impact on the traffic flow of area roadways and that the construction, maintenance, or proposed upgrading of such roads is adequate to withstand the weight of the vehicles.**

Not applicable. Cleco does not receive waste generated off site.

- c. Existing Land Use.** A description of the total existing land use within three miles of the facility (by approximate percentage) including, but not limited to:

- i. residential;**

- ii. health-care facilities and schools;
- iii. agricultural;
- iv. industrial and manufacturing;
- v. other commercial;
- vi. recreational; and
- vii. undeveloped.

The existing land use within this radius is predominantly undeveloped (45%) or agricultural (25%). The only significant industrial use is the Rodemacher Power Station (22-23%) and the adjacent Boise Cascade facility (5%). Approximately 2-3% of the area is residential or commercial.

- d. **Aerial Photograph.** A current aerial photograph, representative of the current land use, of a one-mile radius surrounding the facility. The aerial photograph shall be of sufficient scale to depict all pertinent features. (The administrative authority may waive the requirement for an aerial photograph for Type III facilities.)

Please see Figure 4 for an aerial map showing a one-mile radius around the facility.

- e. **Environmental Characteristics.** The following information on environmental characteristics:
 - i. a list of all known historic sites, recreation areas, archaeologic sites, designated wildlife-management areas, swamps and marshes, wetlands, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility perimeter or as otherwise appropriate;
 - ii. documentation from the appropriate state and federal agencies substantiating the historic sites, recreation areas, archaeologic sites, designated wildlife-management areas, wetlands, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility; and
 - iii. a description of the measures planned to protect the areas listed from the adverse impact of operation at the facility;

There are no known historic sites, recreation areas, designated wildlife-management areas, swamps and marshes, habitats for endangered species, and other sensitive ecologic areas within 1,000 feet of the facility

perimeter. The facility is located in proximity to wetlands previously permitted by the United States Army Corp of Engineers (COE) New Orleans District and subsequently given approval by the LDEQ for construction of a solid waste management unit. There is one archaeological site (RA113), approximately 900 feet to the north of the area. According to the Louisiana State Historic Preservation Office records, RA113 is not a defined site which is eligible for the National Register. The location of the proposed facility within the existing perimeter levee system precludes site operations from affecting this area. A site location map is provided as Figure 1. Correspondence from the COE, the State Historic Preservation Office, United States Fish and Wildlife Service, and Louisiana Department of Wildlife and Fisheries is provided in Appendix A.

- f. A wetlands demonstration, if applicable, as provided in LAC 33:VII.709.A.4.**

A wetland demonstration, as provided in LAC 33:VII.709.A.4 is not applicable because the facility has received wastes prior to October 9, 1993.

- g. Demographic Information. The estimated population density within a three-mile radius of the facility boundary, based on the latest census figures.**

The population within a one-mile radius of the proposed project boundaries consists of 101 people. The largest incorporated town within a 5-mile radius of the site is Boyce, which has a population of 1,190, based on the 2000 U.S. Census. The data sheets are included as Appendix B.

- 2. The following information regarding wells, faults and utilities is required for Type I and II facilities:**

- a. Wells. Map showing the locations of all known or recorded shot holes and seismic lines, private water wells, oil and/or gas wells, operating or abandoned, within the facility and within 2,000 feet of the facility perimeter and the locations of all public water systems, industrial water wells, and irrigation wells within one mile of the facility. A plan shall be provided to prevent adverse effects on the environment from the wells and shot holes located on the facility.**

There are three plugged and abandoned oil and/or gas wells within 2,000 feet of the perimeter. The location of these three wells in addition to any public water systems, industrial water wells, and irrigation wells within one mile of the facility is included in Appendix C. The list of the wells and other available data, such as well depth, completion data, aquifer name, present status and owner's name, are included in Appendix C.

- b. Faults**

- i. scaled map showing the locations of all recorded faults within the facility and within one mile of the perimeter of the facility; and**

- ii. **demonstration, if applicable, of alternative fault set-back distance as provided in LAC 33:VII.709.A.5.**

There are no known faults within the facility or within a one mile of the perimeter of the facility. A review of available published literature, including the 1984 Geologic Map of Louisiana (C.C. Groat, Director, Louisiana State Geological Survey) did not reveal data on faulting near the facility. Over 50 soil borings have been conducted at the facility and faults have not been noted within the facility. The Rodemacher Power Station is not located in an unstable area.

- c. **Utilities. Scale map showing the location of all pipelines, power lines, and right-of-ways within the site.**

A detailed map showing the location of all pipelines, power lines and right of ways within the property boundaries is included as Figure 2.

- B. **Facility Characteristics. Standards concerning facility characteristics are contained in LAC 33:VII.709.B (Type I and II facilities), LAC 33:VII.717.B (Type I-A and II-A facilities), and LAC 33:VII.719.B (Type III facilities). A facility plan, including drawings and a narrative, describing the information required below must be provided.**

Cleco has addressed the standards concerning facility characteristics under LAC 33:VII.709.B.

1. **The following information is required for all facilities:**

- a. **elements of the process or disposal system employed, including, as applicable, property lines, original contours (shown at not greater than five-foot intervals), buildings, units of the facility, drainage, ditches and roads;**

See Figure 1 for a site location map and Figure 2 for a facility map. All operations occur within the property boundaries. Drawings with original contours are addressed in the responses to LAC 33:VII.521.F.2.

- b. **the perimeter barrier and other control measures;**

Facility security is addressed within the Facility Operational Plan (Appendix D). As stated within that Plan, the proposed facility will be located within the RPS site. All visitors to the plant are required to check in at the front gate and must be escorted by company personnel at all times. In addition, unauthorized entry to the facility is minimized by perimeter features including fencing in open areas, and natural deterrents such as Lake Rodemacher and portions of heavily wooded areas.

c. a buffer zone;

The proposed facility will be located within the RPS and will be provided with a minimum 200-foot buffer zone to the fenced property line.

d. fire-protection measures;

Fire protection measures for the proposed facility and the entire RPS site are addressed within the Facility Operational Plan (Appendix D) and the site Emergency Response Action Plan (ERAP) as provided in Appendix E of this application.

e. landscaping and other beautification efforts;

In accordance with LAC 33:VII.709.B.4, facilities located within the boundaries of a plant, industry, or business that generates the waste to be processed or disposed of, are not required to provide landscaping. Cleco, though, will continue to provide all efforts to minimize adverse aesthetic impacts to the surrounding area.

f. devices or methods to determine, record, and monitor incoming waste;

Not applicable. Internal recordkeeping procedures for the proposed facility are provided within the Facility Operational Plan (Appendix D).

g. NPDES discharge points (existing and proposed); and

RPS is currently operating under LPDES permit number LA008036, which became effective on April 1, 2006. An addendum has been sent to LDEQ to include anticipated changes in operations due to the installation of Solid Fuel Unit Number 3. A detailed map of existing outfalls for the RPS has been included as Figure 5.

h. other features, as appropriate.

Additional features related to the operation of the facilities are discussed in response to the specific regulatory requirements provided herein.

2. The following information is required for Type I and II facilities:**a. areas for isolating nonputrescible waste or incinerator ash, and borrow areas; and**

No areas will be isolated for nonputrescible waste and incinerator ash. There will also be no borrow areas.

b. location of leachate collection/treatment/removal system.

Leachate collection is not applicable to surface impoundments.

- C. Facility Surface Hydrology.** Standards governing facility surface hydrology are contained in LAC 33:VII.711.A (Type I and II landfills), LAC 33:VII.713.A (Type I and II surface impoundments), LAC 33:VII.715.A (Type I and II landfarms), LAC 33:VII.717.C. (Type I-A and II-A facilities), and LAC 33:VII.719.C (Type III facilities).

- 1. The following information regarding surface hydrology is required for all facilities:**

- a. a description of the method to be used to prevent surface drainage through the operating areas of the facility;**

The topographic setting of the Unit 2 Metal Cleaning Waste Pond is such that no significant surface drainage will be toward the pond. No surface water streams pass through the pond. Historically, a small surface stream flowed from the northwest corner of the Fly Ash Pond toward the east-southeast. With the construction of the diked area and perimeter interceptor ditches, there are no surface streams through the Fly Ash Pond. Additionally, there are no surface streams through the Bottom Ash Pond.

- b. a description of the facility runoff/run-on collection system;**

The Unit 2 Metal Cleaning Waste Pond was constructed by building a levee across a low area. On the eastern side, drainage flows naturally away from the impoundment while on the western side the levee prevents run-on and run-off.

For the Fly Ash Pond, there is no outlet for discharge of rain water and this water will be accumulated in a low lying area within the diked Fly Ash Pond. This water is used to moisten the dry fly ash as it is dumped via truck in the pond.

The Bottom Ash Pond has a perimeter interceptor ditch on the northwestern portion of the pond which should divert surface water run on.

- c. the maximum rainfall from a 24-hour/25-year storm event;**

The maximum rainfall from a 24-hour/25-year storm event is approximately 9 inches. This information was obtained from *Rainfall Frequency/Magnitude Atlas for the South-Central United States*, SRCC technical Report 97-1, Geosciences Publications Department of Geography and Anthropology Louisiana State University, Baton Rouge, LA.

- d. the location of aquifer recharge areas in the site or within 1,000 feet of the site perimeter, along with a description of the measures planned to protect those areas from the adverse impact of operations at the facility; and**

The RPS facility overlies a portion of the aquifer recharge area for both the Pleistocene Terrace aquifer of the central and north Louisiana and the Alluvial aquifer, as shown in Appendix F. The majority of the RPS is located on the aquifer recharge area for the Terrace aquifer. The Unit 1 Metal Cleaning Waste

Pond, the Coal Sedimentation Pond, and the Unit 2 Metal Cleaning Waste Pond are situated on the Terrace aquifer, while the Fly Ash Pond, Bottom Ash Pond, and Ash Management Area are situated on the aquifer recharge area for the Alluvial aquifer.

- e. **if the facility is located in a flood plain, a plan to ensure that the facility does not restrict the flow of the 100-year base flood or significantly reduce the temporary water-storage capacity of the flood plain, and documentation indicating that the design of the facility is such that the flooding does not affect the integrity of the facility or result in the washout of solid waste.**

The Fly Ash Pond is the only facility that is constructed within an area previously permitted through the Army Corps of Engineers (COE) under permit number LMNOD-SP dated March 29, 1977. Cleco currently holds a solid waste permit from the LDEQ for this area to manage ash for future plant expansions.

- D. **Facility Geology. Standards governing facility geology are contained in LAC 33:VII.709.C (Type I and II facilities), LAC 33:VII.717.D (Type I-A and II-A facilities), and LAC 33:VII.719.D (Type III facilities).**

- I. **The following information regarding geology is required for Type I and Type II facilities:**

- a. **isometric profile and cross-sections of soils, by type, thickness, and permeability;**

Isometric soil profiles and geologic cross sections have been constructed for the facilities from available data. The locations of the profiles for the cross sections are shown in Appendix G. Five (5) isometric soil profiles and sixteen (16) geologic cross sections, A-A' through P-P', were constructed from available data and are included in this appendix. Historical geologic cross sections constructed for the facilities are included in Appendix H.

- b. **logs of all known soil borings taken on the facility and a description of the methods used to seal abandoned soil borings;**

A copy of the logs of soil borings is included in Appendix I. Please note that the soil boring logs performed by Aquaterra (2004) and Eagle (2005) are included in this appendix. Soil boring logs were not available for the drilling activities performed by Sargent & Lundy (1981); however, geologic cross sections illustrating these logs are available and are included. Design and construction of the units began before the Louisiana Solid Waste Rules and Regulations were established and the units were initially under interim status prior to the standard permits being issued.

Abandoned soil borings were sealed in accordance with applicable methods at the time of drilling according to available records reviewed. Since May 1993, soil

borings have been sealed in accordance with applicable portions of "Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook" dated December 2000 (LDEQ and LDOTD, 2000).

- c. **results of tests for classifying soils (moisture contents, Atterberg limits, gradation, etc.), measuring soil strength, and determining the coefficients of permeability, and other applicable geotechnical tests;**

A copy of available geotechnical testing used for soil classification is included in Appendix I.

- d. **geologic cross-section from available published information depicting the stratigraphy to a depth of at least 200 feet below the ground surface;**

A fence diagram illustrating Rapides Parish geology to approximately 3,000 feet below ground surface is included as Appendix F. (Plate 4, Water Resources of Rapides Parish, Louisiana, Water Resources Bulletin No. 8, Department of Conservation, Louisiana Geological Survey, and Louisiana Department of Public Works, April 1966).

- e. **for faults mapped as existing through the facility, verification of their presence by geophysical mapping or stratigraphic correlation of boring logs. If the plane of the fault is verified within the facility's boundaries, a discussion of measures that will be taken to mitigate adverse effects on the facility and the environment;**

There are no known faults within the facility or within one mile of the perimeter of the facility. The review of available published information did not reveal information on faulting near the facility.

- f. **for a facility located in a seismic impact zone, a report with calculations demonstrating that the facility will be designed and operated so that it can withstand the stresses caused by the maximum ground motion, as provided in LAC 33:VII.709.C.2; and**

Not applicable. Review of the "Seismicity Map of the State of Louisiana" (Map MF-1081, Stover and others, United States Geological Survey, 1987) does not indicate seismic activity in the area of the Rodemacher Power Station.

- g. **for a facility located in an unstable area, a demonstration of facility design as provided in LAC 33:VII.709.C.3.**

Not applicable. The RPS is not located in an unstable area.

2. **The following information regarding geology is required by Type III wood waste, and construction/demolition-debris facilities:**

- a. general description of the soils provided by a qualified professional (a geotechnical engineer, soil scientist, or geologist) along with a description of the method used to determine soil characteristics; and
- b. logs of all known soil borings taken on the facility and a description of the methods used to seal abandoned soil borings.

Not applicable. The application is for a Type I facility.

E. Facility Subsurface Hydrology. Standards governing facility subsurface hydrology are contained in LAC 33:VII.715.A (Type I and II landfarms).

1. The following information on subsurface hydrology is required for all Type I facilities and Type II landfills and surface impoundments:

- a. delineation of the following information for the water table and all permeable zones from the ground surface to a depth of at least 30 feet below the base of excavation:
 - i. aerial extent beneath the facility;

The RPS facility is located across two different geomorphologic features (Figure 1). These features consist of Intermediate Terrace deposits of Pleistocene age to the northwest and alluvium and natural levee deposits of Holocene age to the southeast. The Intermediate Terraces are composed of terraces formerly designated as Montgomery, Irene, and Bentley (LGS, 1984; Eagle, 2005). The boundary of the Intermediate Terrace and alluvium/natural levee deposits adjacent to the southwest side of the existing Bottom Ash and Fly Ash Ponds.

The northern portion of the facility is located on the Intermediate Terrace deposits and the remainder of the facility is located on the alluvium/natural levee deposits. Therefore, the uppermost aquifer is actually comprised of two different aquifers that are hydrologically connected. The isometric profiles (Appendix G) provide a comprehensive look at the stratigraphy from the geotechnical soil boring data collected at the site. The geologic cross sections combine both the geotechnical soil boring data and older soil boring data acquired during previous investigations. A map of the soil boring locations is included in Appendix I with the soil boring logs presented in Appendices G and H.

The isometric soil profiles and the geologic cross-sections illustrate the difference in stratigraphy and depth to the uppermost water bearing zone for both the Intermediate Terrace deposits and the alluvium/natural levee deposits. Most easily seen on the isometric profile for the Ash Management Area, soil borings B-4, B-5, and B-6 are representative of the Intermediate Terrace deposits and soil borings B-7 through B-22 are representative of the alluvium/natural levee deposits. The uppermost

aquifer within the Intermediate Terrace deposits consists of fine- sand in upper parts, grading downward to coarse sand and gravel. The uppermost aquifer within the alluvium/natural levee deposits is described as sandy silt to silty sand often underlain by sandy clay.

The isometric profile and geologic cross-sections also show the connection between the Terrace and alluvial aquifers, indicating that the uppermost aquifer, while comprised of sediments of two different geologic ages, is laterally continuous across the site.

ii. thickness and depth of the permeable zones and fluctuations;

The thickness and depths of the uppermost aquifer are described below for each solid waste facility:

Unit	Thickness Range (Feet)	Depths to Top/Base (Feet NGVD)
Unit 1 Metal Cleaning Waste Pond	15 – 32	(+)100 / (+)67
Unit 2 Metal Cleaning Waste Pond	10 - 23	(+)110 / (+)89
Coal Sedimentation Pond	12 – 26	(+)91 / (+)66
Bottom Ash Pond	25 – 35	(+)64 / (+)40
Fly Ash Pond	15 – 70	(+)65 / (-)5
Ash Management Area	11 – 62	(+)65 / (+)5

The uppermost aquifer is laterally continuous underlying all of the solid waste facilities, as shown in the geologic cross sections included in Appendix G. Please note that the Unit 1 Metal Cleaning Waste Pond, Unit 2 Metal Cleaning Waste Pond, and Coal Sedimentation Pond are located on the Intermediate Terrace deposits. The Bottom Ash Pond and Ash Management Area are located on the boundary of the Intermediate Terrace deposits and the alluvium/natural levee deposits and the Fly Ash Pond is located on the alluvium/natural levee deposits.

iii. direction(s) and rate(s) of groundwater flow based on information obtained from piezometers and shown on potentiometric maps; and

Groundwater flow at the facility was evaluated at the Rodemacher Power Station using 12 monitoring wells. These are wells W-1 to W-5 and wells

W-7 to W-13. A copy of the monitoring well construction diagrams is included in Appendix I.

Horizontal groundwater flow was evaluated in the uppermost aquifer by construction of potentiometric surface maps from data measured in monitoring wells at the Rodemacher Power Station. The locations of these wells are shown in Appendix J. An evaluation of groundwater flow indicates that horizontal groundwater flow at the facility is consistently towards local surface water bodies with flow towards Lake Rodemacher in the power station portion of the property and towards Bayou Jean de Jean in the area of the Fly Ash Pond, Bottom Ash Pond, and Ash Management Area. Based on USGS topographic quadrangles of Lake Rodemacher area, the spillway elevation of Lake Rodemacher is 100 Feet NGVD. Groundwater elevations determined in monitoring wells near the lake are generally higher than this maximum lake elevation, supporting groundwater flow towards the lake. This is depicted in the groundwater contour maps included in Appendix J.

Groundwater flow rate was evaluated using the groundwater flow equation, $v = [k (dh/dl)] / n_e$. For this equation, v is groundwater flow velocity in ft/day, k is hydraulic conductivity in ft/day, dh/dl is hydraulic gradient in ft/ft, and n_e is effective porosity (unitless).

An hydraulic conductivity (k) value ranging from 10 to 100 ft/day was assumed (Heath, 1989) based on the silty sand and fine- to coarse-grained sand observed in soil cuttings from soil borings completed at the site. An hydraulic gradient (dh/dl) value ranging from 0.0004 to 0.007 ft/ft was used based on potentiometric surface maps. Note that the hydraulic gradient is steeper in the area of the Bottom Ash Pond and Fly Ash Pond (Intermediate Terraces/alluvium natural levee boundary), and flatter in the area of the Unit 1 Metal Cleaning Waste Pond, the Unit 2 Metal Cleaning Waste Pond, and the Coal Sedimentation Pond situated on the Intermediate Terraces. An effective porosity (n_e) of 0.2 was assumed based on the soil types of the uppermost aquifer (Fetter, 2001). Using these values, the groundwater flow rate (v) is estimated to range from 0.02 to 3.5 feet/day.

It is important to note that this is an advective rate and does not take into account potential hydrogeological heterogeneities such as adsorption, biodegradation, dispersion, or other retarding factors in the groundwater flow in this zone. Additionally, variations in the advective flow may occur due to potential lateral geological heterogeneities.

- iv. **any change in groundwater flow direction anticipated to result from any facility activities;**

Historical potentiometric maps for the RPS are included in Appendix J. No changes in groundwater flow direction have been noted.

- b. **delineation of the following, from all available information, for all recognized aquifers which have their upper surfaces within 200 feet of the ground surface:**

- i. **areal extent;**

Groundwater occurs in three major geohydrologic units in the vicinity of the RPS. From shallow to deep, these regional units include the Red River valley alluvium, the upland sand and gravel Terrace deposits of Pleistocene age; and sand beds in Miocene-age rocks.

The southeastern most part of the site is immediately underlain by the Red River alluvial aquifer. It is comprised of floodplain deposits of the Red River that consist of sand, silt and clay with some gravel. Northwest of the Red River floodplain are topographically higher, older Pleistocene sand and gravel deposits. The upland deposits are mainly composed of fine to coarse sands with an overlying silty clay layer in most localities.

The upland Pleistocene deposits (Intermediate Terrace Aquifer) cover the Miocene rocks with a mantle that varies in thickness from less than 100 feet in the northern part of the parish to 200 feet in the southern part of the parish (Newcome and Sloss, 1966).

In the vicinity of the RPS, the upland Pleistocene deposits are underlain by Miocene age rocks consisting of the Carnahan Bayou Member of the Fleming Formation. The Carnahan Bayou Member is generally sandy and dips southward at 75 to 150 feet per mile, as shown in a generalized fence diagram for Rapides Parish in Appendix F (Newcome and Sloss, 1966, Water Resources of Rapides Parish, Louisiana, Water Resources Bulletin No. 8, Department of Conservation, Louisiana Geological Survey and Louisiana Department of Public Works). A stratigraphic column provides the relationship between geologic formations in Rapides Parish and is shown in Appendix F.

Individual sand beds commonly exist at the base of the sand members in the Miocene rocks. Sand beds are the major aquifers in the Miocene rocks. The sand beds range in thickness from 10 to 230 feet, with an average thickness of approximately 40 feet.

ii. thickness and depth to the upper surface;

According to available literature, the Red River alluvium/alluvial aquifer, in the vicinity of the town of Boyce, Louisiana, can be present from ground surface to depths of 50 to 75 feet below ground surface.

The town of Boyce drilled water well test R-767 and encountered the Miocene age Carnahan Bayou Member of the Fleming Formation at a depth of 262 feet below ground surface (Newcome and Sloss, 1966). In that well, the Carnahan Bayou Member was 31 feet thick.

iii. any interconnection of aquifers; and

Hydrologically, the groundwater in the vicinity of the Rodemacher Power Station is most likely connected to the Red River and Bayou Jean de Jean at shallow depths. There is no evidence, however, to hydrologically connect this shallow aquifer to the much deeper Miocene formation used as a source of drinking water in the vicinity.

iv. direction(s) and rate(s) of groundwater flow shown on potentiometric maps.

According to available published literature, the regional direction of groundwater flow in the Miocene aquifers underlying Rapides Parish is historically east-southeast. Newcome and Sloss, 1966, presented a figure illustrating municipal pumping of groundwater near Alexandria and Lecompte (Appendix F). Based on this data, groundwater flow has been changed toward the pumping centers.

Miocene sands permeability ranges from 90 to 1,000 gallons per day per square foot (Newcome and Sloss, 1966).

2. The following information on subsurface hydrology is required for Type II Landfarms. Delineation of the following information for the water table and all permeable zones from the ground surface to a depth of at least 30 feet below the zone of incorporation:

- a. areal extent beneath the facility;**
- b. thickness and depth of the permeable zones and fluctuations;**
- c. direction(s) and rate (s) of groundwater flow based on information obtained from piezometers and shown on potentiometric maps); and**
- d. any change in groundwater flow direction anticipated to result from any facilities activities.**

Not applicable. The application is for a Type I facility, not a Type II landfarm.

F. Facility Plans and Specifications. Standards governing facility plans and specifications are contained in LAC 33:VII.711.B (Type I and II landfills), LAC 33:VII.713.B (Type I and II surface impoundments), LAC 33:VII.715.B (Type I and II landfarms), LAC 33:717.E (Type I-A and II-A facilities), LAC 33:VII.721.A (Type III construction and demolition debris and woodwaste landfills), LAC 33:VII.723.A (Type III composting facilities), and LAC 33:VII.725.A (Type III separation facilities). Standards for groundwater monitoring are contained in LAC 33:VII.709.E (Type I and II facilities).

- 1. Certification.** The person who prepared the permit application must provide the following certification:

"I certify under penalty of law that I have personally examined and I am familiar with the information submitted in this permit application and that the facility as described in this permit application meets the requirements of the solid waste rules and regulations. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment."

A certification, in accordance with LAC 33.VII 521.F.1, is provided at the beginning of this permit application.

- 2. The following information on plans and specifications is required for Type I and II facilities:**

- a. detailed plan-view drawing(s) showing original contours, proposed elevations of the base of units prior to installation of the liner system, and boring locations;**

A typical cross section of the original and final grades for the Unit 2 Metal Cleaning Waste Pond is shown in *Exhibit 7* in Appendix K.

Typical cross sections of the Fly Ash Pond are similar to those of the adjacent Bottom Ash Pond as shown in *Exhibit 8* in Appendix K. The dry fly ash trucked to the pond will be spread and sprayed for dust control as well as for compaction by dozers spreading the material. Rain water which will pond on the lowest sections of the fly Ash Pond will be used for spraying the ash. The bottom of the Fly Ash Pond and completed dikes will have a minimum 3-foot thickness of relatively impermeable clay. This should protect the underlying groundwater. Furthermore, the waste characteristics of the ash are such that no harmful effects should occur to the quality of groundwater.

Typical cross sections of the Bottom Ash Pond are shown in *Exhibits 11, 12, and 13* in Appendix K.

- b. detailed drawings of slopes, levees, and other pertinent features; and**

For the Unit 2 Metal Cleaning Waste Pond, detailed drawings of slopes, levees, and other pertinent features are shown in *Exhibit 7* in Appendix K.

The Fly Ash Pond is shown in *Exhibit 10* of Appendix K with original and final topographic contours. The Fly Ash Pond is located predominantly in alluvial deposits of the Red River Valley. The pond was constructed by building a 20-foot wide dike around the area to be used. At elevation 103 feet NGVD, the surface area of the pond will be 109 acres. The slope of the dikes is 3 horizontal to 1 vertical. The interior side of the dikes has a minimum 3-foot thick layer of compacted clay. There is an effective horizontal clay layer of about 10 feet.

The Bottom Ash Pond is shown in *Exhibit 7* of Appendix K with original and final contours. The Bottom Ash Pond is located on both alluvial and terrace deposits. The surface area of the pond is 36 acres at an elevation of 106 feet NGVD. The dikes built for the pond have a slope of 3 horizontal to 1 vertical. Four inches of seeded top soil are placed on the outward portions of the dikes for erosion control. The limits of excavation were controlled by the required design size. The ash pipe corridor is also shown in *Exhibit 12* in Appendix K along with the discharge channel to the LPDES discharge point. Cross sections of the bottom ash dikes and other details are shown in *Exhibit 11* in Appendix K.

- c. the type of material and its source for levee construction. Calculations shall be submitted demonstrating that an adequate volume of material is available for the required levee construction.

For these facilities, the levees were constructed from on-site materials. Since additional construction is not anticipated, calculations are not applicable.

Erosion protection for the Bottom Ash Pond is concrete fabriform.

3. The following information on plans and specifications is required for Type I, II, and III landfills:
- a. approximate dimensions of daily fill and cover; and
- Not applicable.
- b. the type of cover material and its source for daily, interim, and final cover. Calculations shall be submitted demonstrating that an adequate volume of material is available for daily, interim, and final cover.
- Not applicable.
4. The following information on plans and specifications for the prevention of groundwater contamination must be submitted for Type I and II facilities:
- a. representative cross-sections and geologic cross-sections showing original and final grades, approximate dimensions of daily fill and cover, drainage, the water table, groundwater conditions, the location and type of liner, and other pertinent information;

For the Unit 2 Metal Cleaning Waste Pond, a typical cross section is included as *Exhibit 7* in Appendix K. The facility relies upon the naturally occurring low-permeability soil in the area of the impoundment to prevent groundwater contamination.

For the Fly Ash Pond, cross sections of the subsurface conditions are included in *Exhibits 11 through 15* in Appendix K.

For the Bottom Ash Pond, the soil types are comprised of a minimum of 3 feet of compacted clay over silty to clayey sands or very plastic in-situ clay (CH). Cross sections of the subsurface conditions are shown in *Exhibits 8 and 9* in Appendix K.

- b. a description of the liner system, which shall include: calculations of anticipated leachate volumes, rationale for particular designs of such systems, and drawings; and**

For the Unit 2 Metal Cleaning Waste Pond, an in-situ silty to sandy clay (CL) varying in thickness from 3.5 to 9.0 feet forms suitable protective liner for groundwater. A minimum 3-foot thick compacted clay liner acts an effective barrier for liquid waste migration. The effective horizontal thickness of the sloping clay liner is 10 feet.

For the Fly Ash Pond, an engineered liner system was not included as part of the original designs of the facility, however, as shown in the geotechnical information; the soils in the area of the pond are primarily clays and silty clays.

For the Bottom Ash Pond, the groundwater table is at least 6 feet below construction grade and the 6 feet of soil between the groundwater and the bottom of the pond is a CH material. In the northwestern part of the Bottom Ash Pond and in the surrounding dikes, the minimum thickness of compacted clay is 3 feet. The natural impermeability of the in-situ soils and the compacted clay liner form a suitable protective barrier to the groundwater.

No leachate collection or treatment facilities are needed for the liquid waste pumped to the Bottom Ash Pond. The design of the facility incorporates an impermeable silty clay liner within the dike and over the western portion (see *Exhibit 8* in Appendix K for limits) with a natural silty clay liner along the remaining bottom portion of the pond.

- c a description of the leachate collection and removal system, which shall include calculations of anticipated leachate volumes, rationale for particular designs of such systems, and drawings.**

No leachate collection and/or treatment system is designed for this facility since its operation will contain liquids.

5. The following information on plans and specifications for groundwater monitoring must be provided for Type I and II facilities:

The groundwater monitoring program was developed in accordance with LAC 33:VII.709.E. The detailed *Groundwater Sampling and Analysis Plan* is included as Appendix L.

- a. a minimum of three piezometers or monitoring wells in the same zone must be provided in order to determine groundwater flow direction;**

The groundwater monitoring system will consist of 22 monitoring wells. The wells are for the intended purpose of monitoring the uppermost aquifer. Monitoring wells W-1, W-2 and W-22 are upgradient wells that have not been affected by leakage from the units and, therefore, represent the quality of background groundwater. Please refer to the Groundwater Sampling and Analysis Plan and *Exhibit 1* of that document presented in Appendix L.

- b. for groundwater monitoring wells, cross-sections illustrating construction of wells, a scaled map indicating well locations and the relevant point of compliance, and pertinent data on each well, presented in tabular form, including drilled depth, the depth to which the well is cased, screen interval, slot size, elevations of the top and bottom of the screen, casing size, type of grout, ground surface elevation, etc.;**

A comprehensive Groundwater Sampling and Analysis Plan is included in Appendix L. This document includes a monitoring well location map with the relevant point of compliance shown.

- c. a groundwater monitoring program including a sampling and analysis plan that includes consistent sampling and analysis procedures that ensure that monitoring results provide reliable indications of groundwater quality;**

A comprehensive Groundwater Sampling and Analysis Plan for the Rodemacher Power Station site, which addresses the information required in LAC 33:VII.709.E.1, is included in Appendix L. Cleco intends to utilize a single system for monitoring solid waste facilities.

- d. for an existing facility, all data on samples taken from monitoring wells in place at the time of the permit application must be included. (If this data exists in the department records, the administrative authority may allow references to the data in the permit application.) For an existing facility with no wells, groundwater data shall be submitted within 90 days after the installation of monitoring wells. For a new facility, groundwater data (one sampling event) shall be submitted before waste is accepted;**

A comprehensive Groundwater Sampling and Analysis Plan for the RPS site, which addresses the information required in LAC 33:VII.709.E.1, is included in Appendix L. Cleco intends to utilize a single system for monitoring the solid

waste permitted facilities at the RPS. Copies of historical groundwater quality are on file with the Department.

e. a plan for detecting, reporting, and verifying changes in groundwater; and

A comprehensive Groundwater Sampling and Analysis Plan for the RPS site, which addresses the information required in LAC 33:VII.709.E.1, is included in Appendix L. Cleco intends to utilize a single system for monitoring the solid waste permitted facilities at the RPS.

f. the method for plugging and abandonment of groundwater monitoring systems.

Cleco will comply with all of the necessary well plugging and abandonment requirements. All wells, piezometers, and soil borings will be plugged and abandoned in accordance with LAC 70:XIII and the *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook*, prepared by the Louisiana Department of Environmental Quality and Louisiana Department of Transportation and Development, December 2000 or most recent update.

6. The facility plans and specifications for Type I and II landfills and surface impoundments (surface impoundments with on-site closure and a potential to produce gases) must provide a gas collection and treatment or removal system.

Not applicable. A gas collection and treatment or removal system is not provided because surface impoundments do not have a potential to produce any gases.

G. Facility Administrative Procedures. Standards governing facility administrative procedures are contained in LAC 33:VII.711.C (Type I and II landfills), LAC 33:VII.713.C (Type I and II surface impoundments), LAC 33:VII.715.C (Type I and II landfarms), LAC 33:VII.717.F (Type I-A and II-A facilities), LAC 33:VII.721.B (Type III construction and demolition debris and woodwaste landfills), LAC 33:VII.723.B (Type III composting facilities), and LAC 33:VII.725.B (Type III separation facilities).

I. The following information on administrative procedures is required for all facilities:

a. recordkeeping system; types of records to be kept; and the use of records by management to control operations;

Cleco will keep the following records:

- Annual reports of the Administrative authority indicating on-site activities
- Copy of the current Louisiana Solid Waste Rules & Regulations
- Permit applications
- Permit modifications
- Operating Logs
- Groundwater Monitoring Reports

- Waste Analysis Records
- Copies of documents submitted to or received from LDEQ
- Other data subsequently required by the Administrative Authority
- Records of waste generated and disposed of in the impoundment
- Certified field notes for construction
- Operator training programs
- QA/QC records
- Inspection by the permit holder or operator
- Post-closure monitoring reports

All records will be maintained for the life of the facility and shall be kept on file for at least three years after closure.

- b. an estimate of the minimum personnel, listed by general job classification, required to operate the facility; and**

The station operators will be the key personnel responsible for operating these facilities.

- c. maximum days of operation per week and per facility operating day (maximum hours of operation within a 24-hour period).**

The Rodemacher Power Station is operated and manned 24 hours a day, 7 days per week.

- 2. Administrative procedures for Type II facilities shall include the number of facility operators certified by the Louisiana Solid Waste Operator Certification and Training Program (R.S. 37:3151 et seq.).**

Not applicable. This application is for a Type I facility.

- H. Facility Operational Plans. Standards governing facility operational plans are contained in LAC 33:VII.711.D (Type I and II landfills), LAC 33:VII.713.D (Type I and II surface impoundments), LAC 33:VII.715.D (Type I and II landfarms), LAC 33:VII.717.G (Type I-A and II-A facilities), LAC 33:VII.721.C (Type III construction and demolition debris and woodwaste landfills), LAC 33:VII.723.C (Type III composting facilities), and LAC 33:VII.725.C (Type III separation facilities).**

The Facility Operational Plan for the facility is provided as Appendix D of this application and addresses the requirements of LAC 33:VII.521.H, LAC 33:VII.711.D, and LAC 33:VII.713.D. Explanations for specific requirements that are not applicable to the Operational Plan for the proposed facility are provided below.

- I. The following information on operational plans is required for all facilities:**

- a. **types of waste (including chemical, physical, and biological characteristics of industrial wastes generated on-site), maximum quantities of wastes per year, and sources of waste to be processed or disposed of at the facility;**

Unit 2 Metal Cleaning Waste Pond

The waste placed in the impoundment is primarily water with minute concentrations of cleaning solution chemicals. The types and quantities of waste expected to be pumped to the Unit 2 Metal Cleaning Waste Pond are as follows:

<u>Type / Source</u>	<u>Quantity</u>
Boiler Cleaning Waste	Max 625,000 gallons during boiler cleaning operation every 3 to 5 years* per cleaning, per unit as needed
Air Heater Wash	Approx. 500,000 gallons/cleaning 1 to 4 times per year, per unit as needed
Turbine Cleaning Waste	20,000 gallons, as needed
Misc Water Plant Metal Cleaning Waste	2,000 gallons, as needed
Boiler Blowdown	0 to 150,000 gallons, as needed

- * The power station currently evaporates the boiler cleaning waste in the boiler after collection in frac tanks. Should this authorization change, the waste would again be managed in the impoundment.

Fly Ash Pond

The types and quantities of waste expected to be placed in the Fly Ash Pond are as follows:

<u>Type / Source</u>	<u>Quantity</u>
Fly Ash	85,309 tons/year Max. rate 41,046 lbs/year
Abrasives	Est. 6 tons/year
Sodium Carbonate (tank bottoms)	Approx. 6 tons/year
Neutralized Waste/Fly Ash	Approx. 2 tons/year, as needed

RPS Unit No. 2 utilizes low-sulfur western coal as its fuel source. The fly ash is generated from the air pollution control equipment. A large percentage of the

material being generated is being marketed through an on-site contractor. Only the excess material is being transported to the pond for storage/disposal.

Periodically the air equipment including the economizer and precipitator require cleaning to remove ash buildups. A media such as silica or grain seed is used, and the resulting material is a mixture of fly ash and blasting media.

Sodium carbonate which is fed into the boiler with the coal becomes a part of the resulting ash. Maintenance of the sodium carbonate tank results in clumps which form due to moisture and have to be removed and disposed.

Bottom Ash Pond

The types and quantities of waste expected to be placed in the Bottom Ash Pond are as follows:

<u>Type / Source</u>	<u>Quantity</u>
Bottom Ash	21,331 tons/year Max. rate 10,261 lbs/year
Pyrites	1,160 tons/year
Sluice & Sump Water	1.56 MGD
Resin Beads	Approx. 30 cubic yards/year
Fly Ash Pond Effluent	Approx. 0.086 MGD (when pumping)
Neutralized Waste/Fly Ash	Approx. 2 tons/year, as needed
Other misc. non-hazardous solid waste material such as spill clean-up waste	Case-by-case basis

The bottom ash is fairly inert such that the sluice water quality is largely unaffected by being mixed with the bottom ash for sluicing to the Bottom Ash Pond. The water in the Bottom Ash Pond meets all federal primary drinking water standards. The chemical composition of the wastewater is essentially the same as that put into the system.

- b. waste-handling procedures from entry to final disposition, which could include shipment of recovered materials to a user;

Unit 2 Metal Cleaning Waste Pond

The waste generated by the chemical cleaning or mechanical cleaning of the Unit 2 boiler, the turbine and washing of the air heater to the Unit 2 Metal Cleaning Waste Pond is shown in *Exhibit 9 and 10* in Appendix K. The piping in the Chemical Cleaning System connects the Metal Area Sump to the Unit 2 Metal Cleaning Waste Pumps. The wastewater is collected in the sump and pumped to the Unit 2 Metal Cleaning Waste Pond.

The solvents and washwater used to clean piping, metals, and auxiliary equipment are piped as wastewater to the metal cleaning waste pump suction side of the metal area sump pit. Two metal cleaning waste pumps are provided to maintain the water level in the suction area.

The pumps discharge through a check valve and a stop valve through a 12-inch line routed to the Unit 2 Metal Cleaning Waste Pond.

The operation of the pumps is controlled by the level of wastewater in the suction area. A rod float switch starts and stops the pumps on high and low water levels. A rod float with a mechanical alternator starts and stops the pumps, alternating between pumps depending on the rise and fall of wastewater levels. The rod float will start both pumps in case of a very high wastewater level. A mercury bulb sensor initiates the signal for very high wastewater levels. A second float acts as a low level cutout switch in case the alternator rod float is stuck.

Fly Ash Pond

A dry ash transport air system to convey the coal fly ash from the precipitator hoppers to the fly ash silo is provided. Equipment for dry and moist (dust-less) loading of fly ash into trucks for disposal is provided.

Precipitator Fly Ash System – Each of the two precipitators has 24 hoppers for dust collection and each hopper has a fly ash outlet valve that feeds into an eight-inch transport line. Each hopper has two electric vibrators that operate when rat holing or arching of the dust in the hopper creates a low vacuum in the transport line.

Fly Ash Transport System – Each precipitator is provided with two separate vacuum fly ash transport lines. There are three 8-inch branch lines to transport the fly ash from five hoppers on each branch line, to an 8-inch line to a 9-inch line to the fly ash silo.

There are three 8-inch branch lines to transport the fly ash from three hoppers on each branch line, to a second 8-inch line, to the 9-inch line, to the fly ash silo. The operator has the option of valving the three 8-inch lines into either of the two 9-inch lines to the silo or to their air separator tank. Each of the two precipitators has a total of six branch lines routed to two 8-inch lines, to two 9-inch lines, to the silo, or to the air separator.

The Nuveyor Fly Ash System – The primary system is top the fly ash dust silo. There are five mechanical vacuum blowers (one a spare) provided to create the air vacuum to move the fly ash through the separators and bag filter to the silo. The blowers have a capacity of 1,600 SCFM with a 100°F inlet air. A tempering water jet is provided in the air intake line to the blower. The flow of water to the jet cools the air and the excess water acts as a seal between the rotor and the housing in the blower.

The blowers create up to a 24-inch Hg pressure when running. Air is drawn into the 8-inch individual lines at the intake valve and it is the velocity of this air that transports the fly ash to the rapid discharge separators. The rapid discharge separator is a vertically mounted cylindrical enclosure with an eccentric designed internal shape. The air enters tangentially and imparts centrifugal force on the heavier than air dust particles. The dust separated from the air drops to the bottom of the container to be discharged to the silo. The air is discharged to a second stage rapid discharge separator that further cleans the air before discharging the air to a bag filter. The four bag filters are 10-inch diameter plume jet, self cleaning, continuous operation units. Each bag filter has 82 bags and the air entering the dirty air chamber flows through to the inside of the bag, then up through the clean air chamber flows through to the inside of the bag, then up through the clean air chamber to the blower suction. The bags are made of Nomex fabric and each bag provides 8.9 square feet of filter area.

The bag material is designed for operation at no higher than 425°F. Pulses of air directed from a nozzle down into the bag remove the dust cake from the outside of the bag surface. The loosened dust cake drops to the bottom hopper section of the filter and is periodically discharged into the silo. The air from the bag filter is routed to the intake of the blower. A silencer is supplied in the intake and discharge lines of the blowers.

Fly Ash Silos – The fly ash silo is a vertical cylindrical steel tank 45 feet in diameter by 73 feet high with facilities for unloading under the tank. Inside the tank, porous stones (diffusers) are installed and connected to air lines for fluidizing the fly ash for uniform and reliable unloading operations. In the floor of the silo are two discharge openings to the unloaders. A pneumatically operated butterfly valve controls the fly ash flow into each of the two feeding hoppers that feed the fly ash by gravity to the two rotary unloaders.

The primary chute from the feeding hopper through a 12-inch butterfly valve supplies fly ash to a dry unloader. The dry unloader is a slanted chute with a row of diffusers on the floor. The diffusers are a manufactured porous stone through which air is permeated to fluidize the fly ash to keep it flowing (prevent packing) to insure uniform flow. The discharge from the dry feeder is a telescoping pipe that fits into the opening of a hopper type truck. The telescoping pipe is raised and lowered by a motor operated hoist. The feeder is put in service by turning on the fluidizer air, inserting the telescoping pipe into the truck, and then opening the feed valve and controlling the ash flow from the silo. A sleeve around the

telescoping discharge pipe has two vent fans in the pipe that discharges the air displaced from the hopper truck, by the inflow of fly ash, back into the silo. The fluidizing air from the dry feeder and the fluidizing blocks in the silo and feeder hopper is supplied from two fluidizing air compressors. The compressors each have a capacity of 995 CFM of air with 80°F inlet air. A silencer is installed on the extension blower discharge pipe.

The secondary rotary unloader is a wetting action type that mixes sufficient low pressure service water into the fly ash to make the operation dustless. From the unloader, a spout routes the moist fly ash into the trucks for disposal.

The dry storage tank is provided with a discharge enclosure with an access door and observation window, and vertical lifting door. A 27-inch x 28-inch dry Excel slag crusher cracks the material to small enough pieces to be handled by a water transport jet, to a 3-inch jet propulsion pump that discharges to the 12-inch sluice line to the Bottom Ash Pond.

Precipitator Oil Fly Ash System – Each of the two precipitators has 24 hoppers for oily fly ash collection.

Each hopper is provided with a 12-inch outlet valve that feeds into an 8-inch diameter transport line. Each hopper has two electric vibrators that operate when rat holing or arching of the ash in the hopper creates low vacuum in the transport line.

Each precipitator has two separate vacuum oil fly ash transport lines. The oil fly ash is transported from the hoppers to the air separator tank.

The Hydroveyor Oil Fly Ash System – The system used to transport oily fly ash from precipitator hoppers to create the vacuum to move the fly ash from the hoppers to an air separator tank. From the air separator tank the slurry of water and ash flows by gravity through one of the two 12-inch ash sluice transport lines to the bottom Ash Pond. The vacuum to move the oily fly ash from the hoppers is created by ash sluice water a 310 psig and 1455 gpm flow entering the venture section of the Hydroveyor where it is combined with water and discharge into the air separator tank.

Air Separator – The fly ash/water mixture from the two hydroveyor lines discharges into an air separator tank. The air separator tank is a 4-foot diameter durite vertical cylindrical tank with two tangential inlets. These inlets create a centrifugal force that separates the air from the water/ash mixture. A 12-inch vent discharges the air to atmosphere from the center of the tank roof. A 12-inch discharge line to flow by gravity through one of the two 12-inch ash sluice transport lines to the Bottom Ash Pond.

Fly Ash Pond – The fly ash is moistened with a water spray as it is unloaded from trucks and by natural precipitation when placed in the pond. After disposal in the

pond, the fly ash forms a pisolitic substance which is fairly unreactive such that any leachate is not significantly influenced by the ash.

Bottom Ash Pond

The ash handling system provides the piping and transport water to convey the bottom ash from the slag tanks, clinkers and ash from the economizer hoppers, and pyrites from the mill hoppers. When oil is used as a fuel, oil fly ash will be blown into the Hydroveyor, where it is sluiced into the bottom Ash Pond.

Resin beads which require disposal on an occasional basis are transported in drums or other containers and emptied into the pond.

c. minimum equipment to be furnished at the facility;

A description of the equipment used for the Unit 2 Metal Cleaning Waste Pond and the Fly Ash Pond are described above. A description of the equipment for the Bottom Ash Pond is described below.

H.P. Ash Sluice Pumps – Two H.P. sluice pumps supply water at 400 psig to the jet propulsion pumps in the sub systems for slag, ash, and pyrite transportation. The pumps take their suction from the ash sluice surge tanks and discharge into the H.P. ash sluice water piping. Each pump has a capacity of 4500 gpm at 880-foot discharge head. The two pumps discharge into a 16-inch header for distribution to the nozzles of the Jetpulsion pumps. The Jetpulsion pumps supplied with water are:

- 4 – slag tank jets – (88 tons/hour each)
- 2 – Hydroveyor evacuators – (21.5 tons/hour each)
- 1 – pyrite transfer tank jet pump – (35 ton/hour)
- 6 – pyrite hopper jet pumps
- 1 – economizer tank jet pump

The slag jet pumps provide the motive power to transport the slag/water mixture to the Bottom Ash Pond. The slag transport lines are two 12-inch slag lines that route the slag/water mixture to the Bottom Ash Pond. One line being used and the other for redundancy.

Ash Sluice Surge Tank – A cylindrical vertical 25,000-gallon ash water tank is provided to supply the ash sluice pumps. The tank has an internal 24-inch overflow pipe that discharges any excess water in the tank to the boiler area sump pit. An 18-inch line from L.P. Service Water System provides the water used in the Ash Sluice Water System.

Boiler Area Sump Pumps – The slag tank agitating and cooling water, slag tank neck seal overflow waters, and other miscellaneous return and drain water from the boiler areas are all returned to the boiler area sump pit. Two boiler area sump pumps maintain in the water level pit. The pumps are level operated, starting on high water in the pit and stopping when level has been pumped down. Each pump has a capacity of 1,000 gpm at 160 psig NDH and discharge into a 12-inch line routed to the Bottom Ash Pond.

Bottom Ash Hopper and Accessories – The bottom ash hopper is a 3/8-inch mild steel plates, ate filled, “W” type, two section gravity discharge structure. The hopper has an active storage capacity of 4900 cubic feet of ash with an average ash level one foot below the normal water level. This represents about 22 hours accumulation of ash with a density of 45 lbs. per cubic foot. The hopper is provided with an overflow box and skimmer cap, a weir box and overflow pipe to the boiler area sump. An overflow warning probe is installed in the overflow box.

Seal Trough – A water seal trough around the top of the ash hopper provides a seal between the boiler furnace and the ash hopper. The seal allows for the vertical expansion and horizontal movement of the boiler. A continuous flow of 50 gpm of low pressure service water is required to maintain a level in the trough. The seal trough also requires daily flushing with 550 gpm of low pressure service water at 50 psig.

Discharge Doors – Both of the “V” sections contain 24-inch x 24-inch vertical lifting doors with a hydraulic cylinder operator.

Jetting Nozzle – To assist in the removal of ash from the hopper, jetting nozzles are provided as follows:

40 hopper jetting nozzles, five on each slope

8 door nozzles, two opposite each vertical door

4 emergency jetting nozzles, one for each door

Excen Crusher – One 33-inch x 30-inch Excen Crusher (clinker grinder) is provided for each of the four hopper outlets. The crusher breaks up any clinkers to a size suitable for conveying by the ash sluice system.

Jetpulpusion Pump – Each of the four ash hopper outlets is provided with an 8-inch Jetpulpusion Pump downstream for the Excen Crushers. The Jetpulpusion Pump has no moving parts. It depends on a high pressure jet of water (2300 gpm at 300 psig) entering a venture, section, creating sufficient velocity to convey the mixture of water and ash to the Bottom Ash Pond.

Pyrite Hopper – A 12-cubic-foot pyrite hopper is provided for each of the six coal pulverizers to receive the pyrites rejected by the pulverizers. Each hopper is equipped with a 3-inch Jetpulpusion pump for emptying the hopper. A 2-inch

overflow is provided, as well as a high level to warn the operator when the hopper is full of pyrites.

Pyrites Transfer Tank – A 600-cubic-foot capacity transfer tank, located on the grade floor just north of the bottom ash hopper, receives pyrites from each of the pulverizer pyrites hoppers. The transfer hopper is equipped with a 6-inch full line from the low pressure service water system, an 8-inch overflow to the boiler sump, and an 8-inch Jetpulpusion pump. The pyrites sluice system capacity from the transfer tank to the Bottom Ash Pond is 30 tons per hour. The capacity from each mill hopper is 10 tons per hour.

d. plan to segregate wastes, if applicable;

Not applicable.

e. procedures planned in case of breakdowns, inclement weather, and other abnormal conditions (including detailed plans for wet-weather access and operations);

Operation of the Unit 2 Metal Cleaning Waste Pond, the Fly Ash Pond, and the Bottom Ash Pond are not influenced by inclement weather.

If a breakdown occurred in the pumps, the Unit 2 Metal Cleaning Waste Pond or Bottom Ash Pond would not receive waste until repairs were made to the pump. Operation of the Fly Ash Pond would not be influenced by inclement weather since the roads are designed for all-weather access. However, if the roads are not accessible, the storage silo accumulates spent ash and has sufficient storage capacity until working conditions are suitable. Should the pH fall outside of the permitted discharge range of 6-9 standard units, adjustment will be performed to meet LPDES discharge permits.

f. procedures, equipment, and contingency plans for protecting employees and the general public from accidents, fires, explosions, etc., and provisions for emergency care should an accident occur (including proximity to a hospital, fire and emergency services, and training programs); and

The only type of emergency event which could affect the Unit 2 Metal Cleaning Waste Pond would be the failure of a pump, a valve, or a conduit. If any of these situations did occur, generation of the waste would be suspended until repairs could be made, or temporary equipment such as pumps and hoses would be employed.

The operation of the Fly Ash Pond and the character of the dry waste are not subject to fire or explosion.

For the Bottom Ash Pond, the most likely emergency situations would be a ruptured line. If one should occur, pumpage would stop and operations would

switch to the backup line then pumpage would resume. The damaged line would be repaired and the spilled material cleaned up.

A copy of the Emergency Plan is included as Appendix E.

g. provisions for controlling vectors, dust, litter, and odors.

Not applicable. The method of transportation, placement, and physical nature of the solid waste to be disposed of in the facilities will minimize the potential to become airborne as dust or trash requiring litter control. The characteristics of the waste will not attract vectors, and will not require routine inspections of the proposed facility for potential odors. In the event that odors are present, various methods are available to control or eliminate them.

2. The following information on operational plans is required for Type I and II facilities:

- a. a comprehensive operational plan describing the total operation, including (but not limited to) inspection of incoming waste to ensure that only permitted wastes are accepted (Type II landfills must provide a plan for random inspection of incoming waste loads to ensure that hazardous wastes or regulated PCB wastes are not disposed of in the facility.); traffic control; support facilities; equipment operation; personnel involvement; and day-to-day activities. A quality-assurance/quality-control [QA/QC] plan shall be provided for facilities receiving industrial waste; domestic-sewage sludge; incinerator ash; friable asbestos; nonhazardous petroleum-contaminated media; and debris generated from underground storage tanks [UST], corrective action, or other special wastes as determined by the administrative authority. The QA/QC plan shall include (but shall not be limited to) the necessary methodologies; analytical personnel; preacceptance and delivery restrictions; and appropriate responsibilities of the generator, transporter, processor, and disposer. The QA/QC plan shall ensure that only permitted, nonhazardous wastes are accepted;**

The Operational Plan is included in Appendix D. The facilities do not receive waste from offsite.

b. salvaging procedures and control, if applicable; and

Not applicable.

The liquid waste in the Unit 2 Metal Cleaning Waste Pond is unsalvageable. It offers no recoverable energy alternative from the refuse and is not suitable for composting.

Cleco has a contract with a vendor to market the fly ash. Historically, fly ash has been used for certain special purposes and it is very probable that more new uses will be discovered as research and development programs by utilities and

universities continue. Additionally, some fly ash is mined from the Fly Ash Pond when the market demands. Approximately 500-200 tons of the material is recovered from the pond annually and sold for re-use.

Materials in the Bottom Ash Pond are marketed by Cleco's representatives for re-use. Cleco's effort to expand the sale of these by-product materials will continue.

c. scavenging control.

Not applicable. Access to the Rodemacher Power Station is restricted; scavenging will not be conducted or allowed by facility personnel or off-site personnel granted entry into the Rodemacher Power Station.

3. The following information on operational plans is required for Type I and II landfarms:

a. items to be submitted regardless of land use:

- i. a detailed analysis of waste, including (but not limited to) pH, phosphorus, nitrogen, potassium, sodium, calcium, magnesium, sodium-adsorption ratio, and total metals (as listed in LAC 33:VII.715.D.3.b);**
- ii. soil classification, cation-exchange capacity, organic matter, content in soil, soil pH, nitrogen, phosphorus, metals (as listed in LAC 33:VII.715.D.3.b), salts, sodium, calcium, magnesium, sodium-adsorption ratio, and PCB concentrations of the treatment zone;**
- iii. annual application rate (dry tons per acre) and weekly hydraulic loading (inches per acre); and**
- iv. an evaluation of the potential for nitrogen to enter the groundwater;**

b. items to be submitted in order for landfarms to be used for food-chain cropland:

- i. a description of the pathogen-reduction method for septage, domestic sewage sludges, and other sludges subject to pathogen production;**
- ii. crops to be grown and the dates for planting;**
- iii. PCB concentrations in waste;**
- iv. annual application rates of cadmium and PCBs; and**
- v. cumulative applications of cadmium and PCBs;**

c. items to be submitted for landfarms to be used for nonfood-chain purposes:

- i. description of the pathogen-reduction method in septage, domestic sewage sludges, and other sludges subject to pathogen production; and
- ii. description of control of public and livestock access.

Not applicable.

4. The following information on operational plans is required for Type I-A and II-A incinerator waste-handling facilities and refuse-derived energy facilities:

- a. a description of the method used to handle process waters and other water discharges which are subject to NPDES permit and state water discharge permit requirements and regulations; and
- b. a plan for the disposal and periodic testing of ash (all ash and residue must be disposed of in a permitted facility).

Not applicable. Cleco is not proposing to operate a Type I-A or II-A facility as part of this application.

5. The following information on operational plans is required for Type I-A and II-A refuse-derived fuel facilities and Type III separation and composting facilities:

- a. a description of the testing to be performed on the fuel or compost; and
- b. a description of the uses for and the types of fuel/compost to be produced.

Not applicable. This application is for a Type I facility.

6. The operational plans for Type I-A and II-A refuse-derived fuel facilities and Type III separation and composting facilities must include a description of marketing procedures and control.

Not applicable. This application is for a Type I facility.

7. The operational plans for Type I and II facilities receiving waste with a potential to produce gases must include a comprehensive air monitoring plan.

Not applicable. The facility will not receive wastes with potential to produce gases.

I. Implementation Plan. Standards governing implementation plans are contained in LAC 33:VII.709.D (Type I and II facilities), LAC 33:VII.717.H (Type I-A and II-A facilities), and LAC 33:VII.719.E (Type III facilities).

1. The implementation plans for all facilities must include the following:

- a. a construction schedule for existing facilities which shall include beginning and ending time-frames and time-frames for the installation of all major

features such as monitoring wells and liners. (Time-frames must be specified in days, with day one being the date of standard permit issuance); and

Not applicable. Since new construction is not anticipated, a schedule is not applicable.

- b. details on phased implementation if any proposed facility is to be constructed in phases.

Not applicable. The facilities will not be constructed in phases.

2. The implementation plans for Type I and II facilities must include a plan for closing and upgrading existing operating areas if the application is for expansion of a facility or construction of a replacement facility.

Not applicable. The existing facilities will not be closed or upgraded.

- J. Facility Closure. Standards governing facility closure are contained in LAC 33:VII.711.E (Type I and II landfills), LAC 33:VII.713.E (Type I and II surface impoundments), LAC 33:VII.715.E (Type I and II landfarms), LAC 33:VII.717.I (Type I-A and II-A facilities), LAC 33:VII.721.D (construction and demolition debris and woodwaste landfills), LAC 33:VII.723.D (Type III composting facilities), and LAC 33:VII.725.D (Type III separation facilities).

The Facility Closure/Post-Closure Plan for the facilities is provided as Appendix M of this application and addresses the requirements of LAC 33:VII.521.J, LAC 33:VII.711.E, and LAC 33:VII.713.E.

1. The closure plan for all facilities must include the following:

- a. the date of final closure;

The facility is anticipated to be closed no sooner than 2040.

- b. the method to be used and steps necessary for closing the facility; and

See the Facility Closure/Post-Closure Plan (Appendix M).

- c. the estimated cost of closure of the facility, based on the cost of hiring a third party to close the facility at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive.

See the Facility Closure/Post-Closure Plan (Appendix M).

2. The closure plan for Type I and II landfills and surface impoundments must include:

- a. a description of the final cover and the methods and procedures used to install the cover;

- b. an estimate of the largest area of the facility ever requiring a final cover at any time during the active life;
- c. an estimate of the maximum inventory of solid waste ever on-site over the active life of the facility; and
- d. a schedule for completing all activities necessary for closure.

See the Facility Closure/Post-Closure Plan (Appendix M).

3. The closure plan for all Type I and II facilities and Type III wood waste and construction/demolition debris facilities shall include the following:

- a. the sequence of final closure of each unit of the facility, as applicable;

See the Facility Closure/Post-Closure Plan (Appendix M).

- b. a drawing showing final contours of the facility; and

See the Facility Closure/Post-Closure Plan (Appendix M).

- c. a copy of the document that will be filed upon closure of the facility with the official parish recordkeeper indicating the location and use of the property for solid waste disposal, unless the closure plan specifies a clean closure.

A copy of the document that will be filed upon closure of the facility with the official parish recordkeeper indicating the location and use of the property for solid waste disposal, unless the closure plan specifies a clean closure is provided in this application (Appendix M).

K. Facility Post-Closure. Standards governing post-closure requirements are contained in LAC 33:VII.711.F (Type I and II landfills), LAC 33:VII.713.F (Type I and II surface impoundments), LAC 33:VII.715.F (Type I and II landfarms), and LAC 33:VII.721.E (Type III construction and demolition debris and woodwaste landfills).

The Closure/Post-Closure Plan addressing the requirements of LAC 33:VII.521.K, LAC 33:VII.711.F, and LAC 33:VII.713.F for the facilities is included as Appendix M.

I. The post-closure plan for all facilities must include the following:

- a. specification of the long-term use of the facility after closure, as anticipated; and
- b. the cost of conducting post-closure of the facility, based on the estimated cost of hiring a third party to conduct post-closure activities in accordance with the closure plan.

See the Facility Closure/Post-Closure Plan (Appendix M).

2. The post-closure plan for Type I and II facilities must include the following:
- a. the method for conducting post-closure activities, including a description of the monitoring and maintenance activities and the frequency at which they will be performed;
 - b. the method for abandonment of monitoring systems, leachate collection systems, gas-collection systems, etc.;
 - c. measures planned to ensure public safety, including access control and gas control; and
 - d. a description of the planned uses of the facility during the post-closure period.

See the Facility Closure/Post-Closure Plan (Appendix M).

- L. **Financial Responsibility.** Standards governing financial responsibility are contained in LAC 33:VII.727. A section documenting financial responsibility according to LAC 33:VII.727, which contains the following information, must be included for all facilities:
1. the name and address of the person who currently owns the land and the name and address of the person who will own the land if the standard permit is granted (if different from the permit holder, provide a copy of the lease or document which evidences the permit holder's authority to occupy the property); or
 2. the name of the agency or other public body that is requesting the standard permit; or, if the agency is a public corporation, its published annual report; or, if otherwise, the names of the principal owners, stockholders, general partners, or officers;
 3. evidence of liability coverage, including:
 - a. personal injury, employees, and the public (coverage, carriers, and any exclusions or limitations);
 - b. property damage (coverage and carrier);
 - c. environmental risks; and
 4. evidence of a financial assurance mechanism for closure and/or post-closure care and corrective action for known releases when needed.

Cleco currently maintains financial assurance for closure, post-closure, and liability for the existing solid waste facilities at Rodemacher Power Station through the use of the financial test. A copy of Cleco's most current financial test documentation, which is identical to the wording specified in LAC 33:VII.727.A.2.i.iv.(e), is provided in this permit application as Appendix N.

Since Cleco utilizes the financial test, the amount of annual payments is not applicable.

- M. Special Requirements.** The administrative authority may require additional information for special processes or systems and for supplementary environmental analysis.

Cleco will comply with any additional information requests that may be necessary for special processes, systems, or for supplementary environmental analysis. Cleco is prepared to supply the Assistant Secretary with additional information related to the approval of this application.

4.0 LAC 33:VII.523. ADDITIONAL SUPPLEMENTARY INFORMATION

The following supplementary information is required for all solid waste processing and disposal facilities. All responses and exhibits must be identified in the following sequence to facilitate the evaluation:

A. a discussion demonstrating that the potential and real adverse environmental effects of the facility have been avoided to the maximum extent possible;

The information contained in the Part II of the permit application demonstrates that no significant adverse environmental effects will result from the operation of the surface impoundment. This is a result of their locations, the chemical and physical nature of the wastes, and the manner in which the surface impoundment is operated.

As stated in the application, the surface impoundment is located within the confines of the power plant and no sensitive environmental areas exist within 1,000 feet of the impoundment; therefore, the operation of the facility will have no opportunity to adversely impact these sensitive areas.

Utility wastes of the type disposed of in the surface impoundment have been shown to be relatively innocuous. Disposal of utility wastes in surface impoundment has been demonstrated by the industry to be the most reliable and environmentally safe method to use. Groundwater monitoring wells are installed around the impoundment and will detect any pollution of the groundwater caused by disposal in the impoundment. Physical features of the disposal facilities which play a part in environmental protection are drainage control, erosion control and maintenance of dikes.

The surface impoundment is operated by personnel who are skilled in all aspects of power plant systems including disposal in surface impoundments. Inspection of the surface impoundment and the systems associated with them are performed routinely and give forewarning of any problems which might cause adverse environmental impacts.

B. a cost-benefit analysis demonstrating that the social and economic benefits of the facility outweigh the environmental-impact costs;

The socio-economic benefits of the disposal facilities must be considered with those of the entire plant. In order for the power plant to fully provide social and economic benefits it must operate as efficiently and safely as possible. The surface impoundment is a small part of the power plant complex, but it provides the benefits of the proper disposal of wastes from the production of electricity. The disposal of these wastes in an environmentally safe manner at the location where they are generated allows for efficient disposal by operators who are trained in all aspects of power plant operation, thereby contributing to the socio-economic benefits of the entire project.

As mentioned in Section A above, the adverse environmental impacts of the operation of the surface impoundment are insignificant. This statement is based on the size and location of the impoundment, the nature of the wastes disposed and the manner of their

operation. Given the insignificance of adverse environmental impacts caused by the surface impoundment, their contribution to the socio-economic benefits of the plant mentioned above far outweigh their environmental impact cost.

C. a discussion and description of possible alternative projects which would offer more protection to the environment without unduly curtailing nonenvironmental benefits;

The only alternative to disposing of the wastes which go onto the surface impoundment is to market the waste or transport it to an off-site disposal location.

The wastes which are generated and disposed of in the surface impoundment have no marketable value and cannot be beneficially reused or recycled in the production of electricity.

Alternative disposal methods are not suitable for the disposal of the wastes which are placed in the surface impoundment. Since the wastes are liquid, they are not suitable for incineration. Neither are the liquid wastes suitable for landfill disposal because the standards of operation governing this type of disposal do not apply to liquid wastes. These alternative methods of disposal are not economically feasible and attempts at disposal of liquid wastes using these alternative methods not suited to them could cause environmental damage by releasing contaminants to the air or to the surface or groundwater. The disposal method selected for the disposal of these liquid wastes – i.e., in a surface impoundment, has been demonstrated by the utility industry to be the most reliable, environmentally safe and economically feasible.

D. a discussion of possible alternative sites that would offer more protection to the environment without unduly curtailing nonenvironmental benefits; and

The surface impoundment is located on the power plant site inside the security measures provided for the entire plant. From this perspective the impoundment provides the maximum non-environmental benefits in that they are near the processes that generate the waste and can take full advantage of operating personnel assigned to the plant. An alternative site for disposal would have to be off the power plant site which would require the transport of the waste.

The two means of transporting the waste would be by pipeline or by truck. Either of these methods would increase the potential for environmental damage by spilling from the truck or breaks in the pipeline. Constructing a disposal site apart from the power plant would be quite expensive and would remove the disposal site from the observation of personnel trained in its operation thereby increasing the likelihood of environmental damage should a problem develop at the site. The existing location of the surface impoundment is the most suited to minimizing the costs and adverse environmental impacts. An alternative location for the surface impoundment would increase the risk of damage to the environmental and would reduce non-environmental benefits.

- E. a discussion and description of the mitigating measures which would offer more protection to the environment than the facility, as proposed, without unduly curtailing non-environmental benefits**

Sufficient mitigating measures have been incorporated minimize potential environmental impacts. These measures include:

1. **Specific Wastes:** The only wastes placed in the facilities are the ones for which it is designated. There is no mixing of wastes placed in the facilities.
2. **Site Protection:** The dikes and other areas are maintained to prevent erosion or degradation.
3. **Groundwater Protection:** Groundwater monitoring wells have been constructed and additional ones are proposed to ensure that the wastes being disposed of are not contaminating groundwater.
4. **Surface Water Protection** Discharges are controlled to meet the criteria of the Louisiana Pollutant Discharge Elimination System Permit for the Plant site. Discharges which meet LPDES criteria do not significantly impact surface waters.

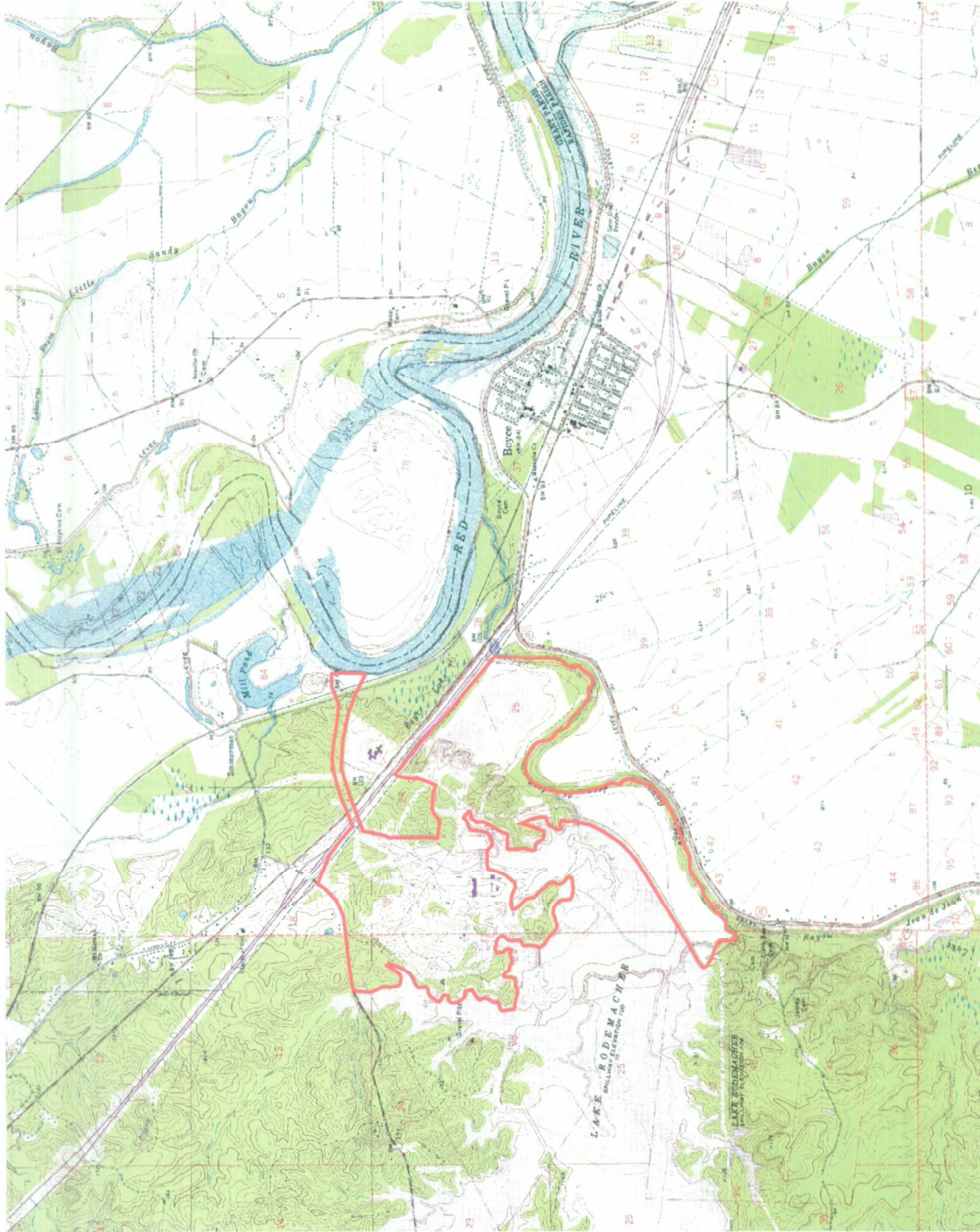
Other mitigating measures which could be applied are inappropriate for this type of waste disposal. These measures include odor control, fugitive dust control, and control of disease vectors. These additional measures would as significant costs to the disposal operation without providing significant protection for the environment.



0 3,000 6,000
SCALE: 1" = 3,000'

Legend:

Secured Property Boundary



CLECO Power LLC

Rodemacher Power Station

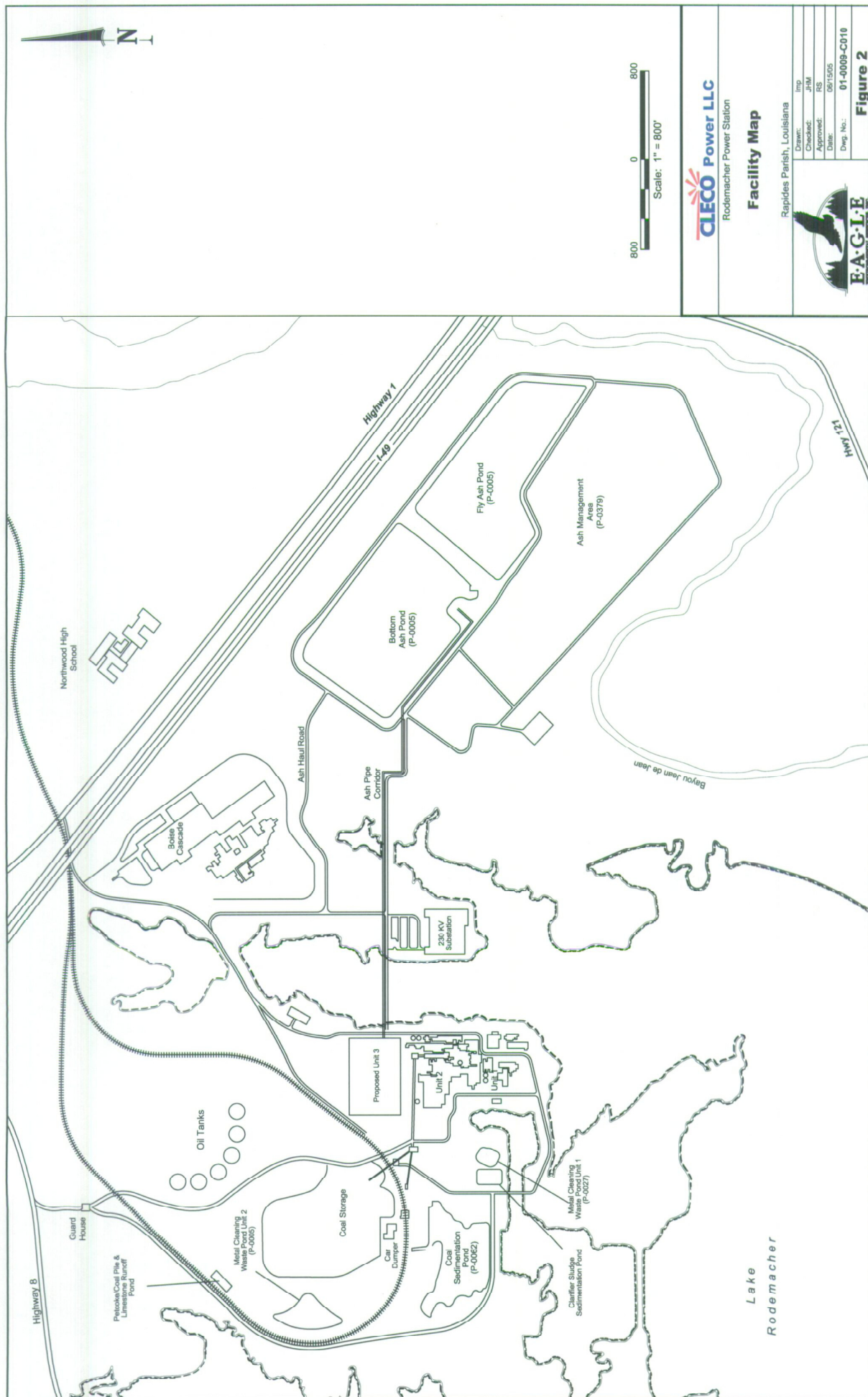
Site Location Map

Rapides Parish, Louisiana



Drawn: jph
Checked: JHM
Approved: RS
Date: 04/19/05
Dwg. No.: 01-0009-C007

Figure 1



CECO Power LLC
Rodemacher Power Station

Facility Map

Rapides Parish, Louisiana

Drawn:	Imp
Checked:	JHM
Approved:	RS
Date:	06/15/05
Dwg. No.:	01-0009-C010



Figure 2





0 3,000 6,000
SCALE: 1" = 3,000'



Rodemacher Power Station

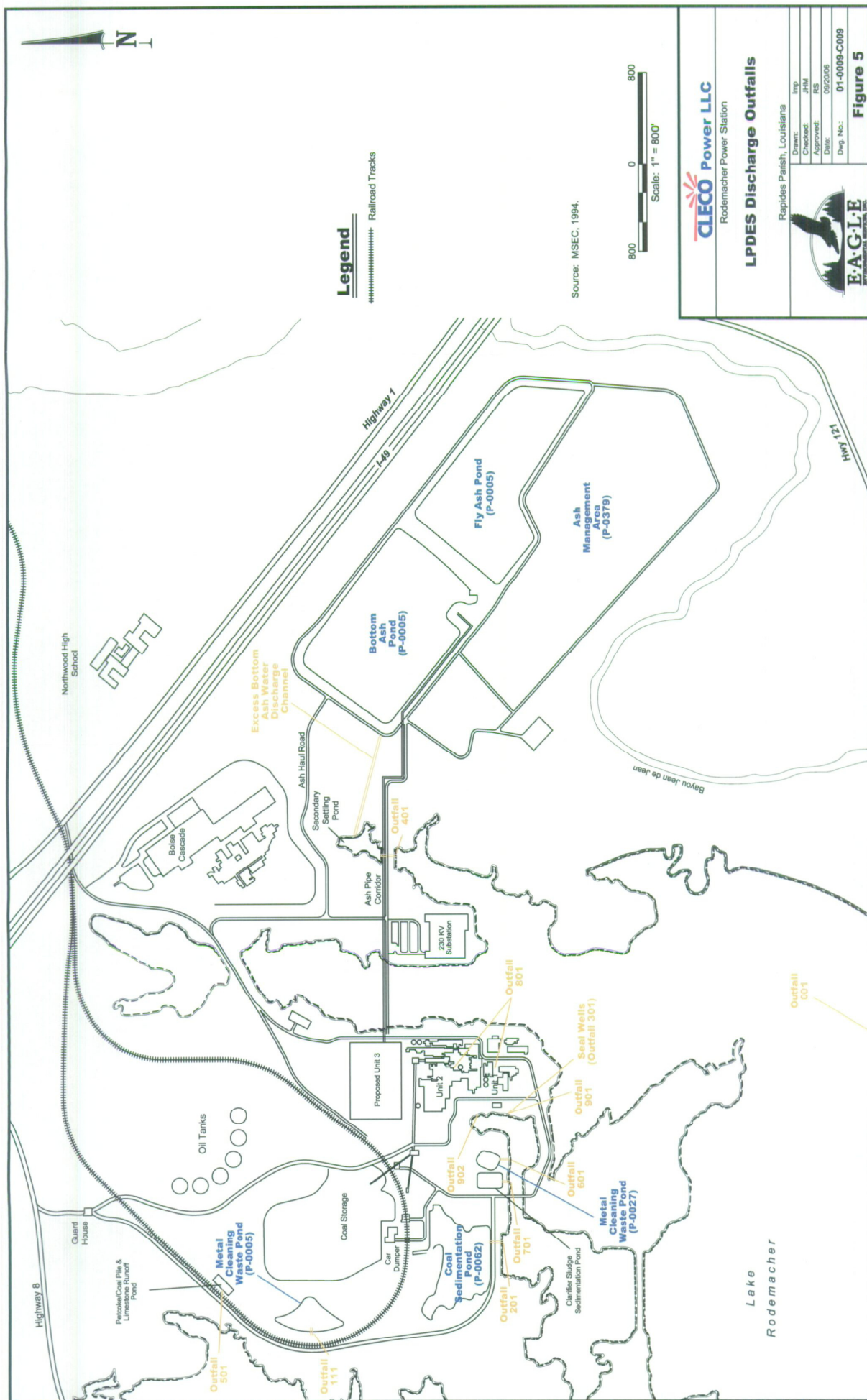
2004 Aerial Photograph

Rapides Parish, Louisiana



Drawn:	jsh
Checked:	JHM
Approved:	RS
Date:	04/12/06
Dwg. No.:	01-0009-C011

Figure 4



APPENDIX A

CORRESPONDENCE



DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS

4155 CLAY STREET

VICKSBURG, MISSISSIPPI 39183-3435

REPLY TO
ATTENTION OF:

May 27, 2005

Operations Division
Regulatory

SUBJECT: Determination of Permit Requirements - Existing
91.41- Acre Ash Containment Area, Central Louisiana Electric
Company, Rodemacher Power Station Facility, Boyce, Rapides
Parish, Louisiana

Mr. Chris M. Chambers
Shaw Environmental, Incorporated
4171 Essen Lane
Baton Rouge, Louisiana 70809

Dear Mr. Chambers:

I refer to your letter requesting a determination of permit requirements regarding the continuation of wasting operations at an existing 91.41-acre ash containment site that is part of Central Louisiana Electric Company's Rodemacher power station facility near Boyce, Louisiana. The site is located in Sections 24, 25, 78, 80, and 81, T5N-R3W, Rapides Parish, Louisiana. The location of the activity is depicted on the enclosed map (enclosure 1).

Based upon the information provided, including original permit documentation from the New Orleans District, we have determined that no further regulatory action is needed for the activities authorized by permit number LMNOD-SP (Bayou Jean de Jean) 1, dated March 29, 1977. Specifically, the permit authorizes the installation and maintenance of a fill and levee ash containment system.

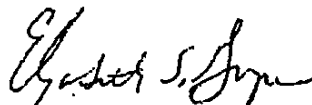
However, please be advised that any additional or future work in potential jurisdictional waters of the United States, including wetlands, outside the limits of the project boundary identified on enclosure 1 should be referred to this office for a determination of permit requirements prior to beginning work.

-2-

This determination of Department of the Army regulatory requirements does not convey any property rights, either in real estate or material or any exclusive privileges, and does not authorize any injury to property or invasion of rights or local laws or regulations, or obviate the requirement to obtain State or local assent required by law for the activity discussed herein.

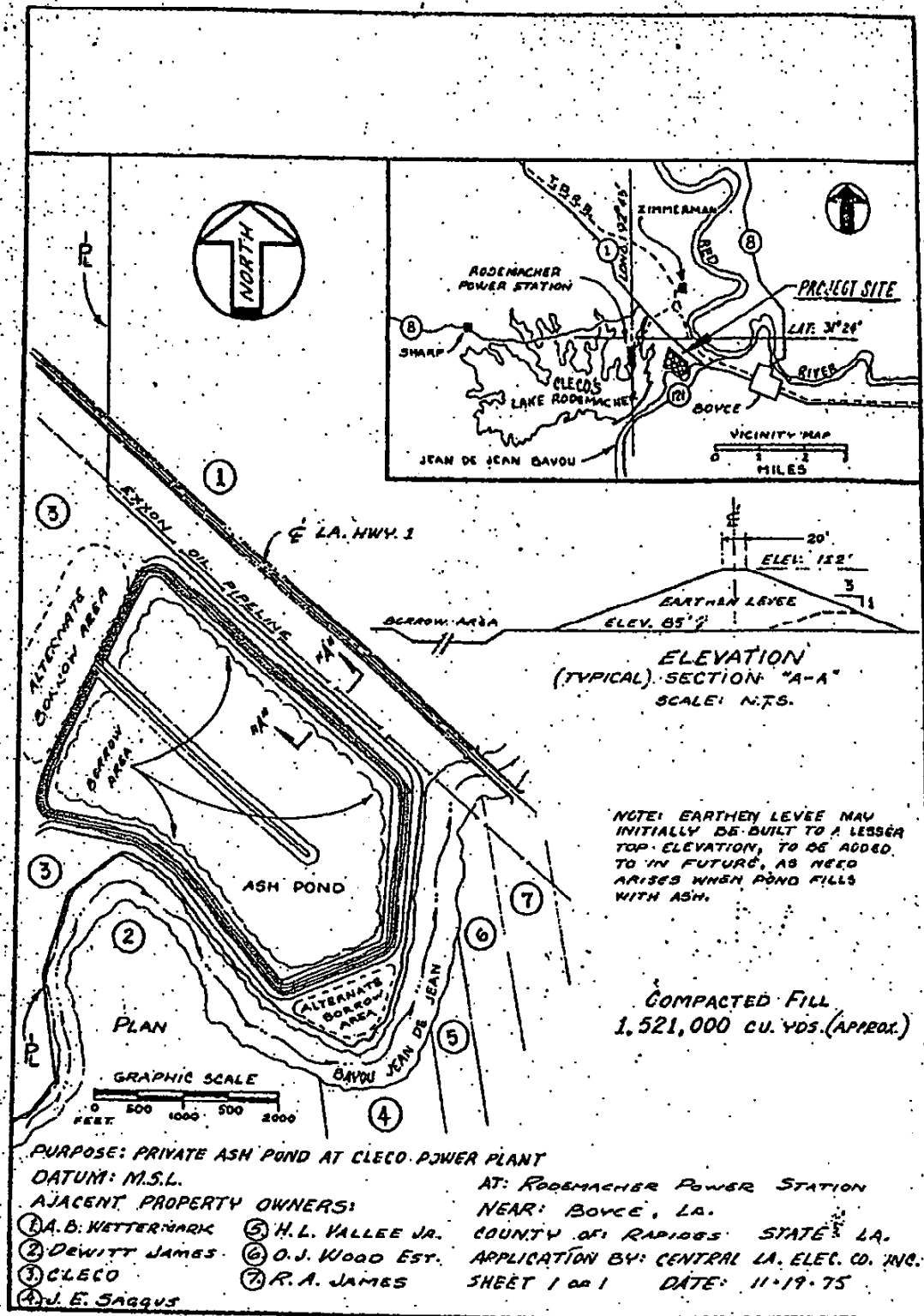
If we may be of any further assistance in this matter, please contact Mr. Robert Ulmer, telephone (601) 631-5637, fax (601) 631-5459 or e-mail address: regulatory@mvk02.usace.army.mil.

Sincerely,



Elizabeth S. Guynes
Chief, Regulatory Branch

Enclosure



8-3
 - Project Boundary (Levee)
 - 4.6.6.1

encl (1)

Exhibit E

**Resource Agency Correspondence
United States Fish and Wildlife Service,
Louisiana Department of Wildlife and Fisheries,
Louisiana State Historic Preservation Office**



United States Department of the Interior

FISH AND WILDLIFE SERVICE

646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

July 13, 2004

Mr. Chris M. Chambers
Shaw Environmental, Inc.
4171 Essen Lane
Baton Rouge, Louisiana 70809

Dear Mr. Chambers:

Please reference your, June 14, 2004, letter, on behalf of Cleco Power L.L.C., requesting our review of a proposed re-powering project at their Rodemacher Power Station in Boyce, Rapides Parish, Louisiana. The U.S. Fish and Wildlife Service has reviewed the information you provided, and offers the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The proposed project is located within areas that may be inhabited by the red-cockaded woodpecker (RCW, *Picoides borealis*), Federally listed as an endangered species. Your preliminary project description, however, did not specify whether the proposed activities would require clearing of pine trees. If the proposed activities would not require such clearing, then no further consultation with this office will be necessary. If pine trees would be cleared, however, the guidance below should be carefully followed.

RCWs nest in open, park-like stands of mature (i.e., greater than 60 years of age) pine trees containing little hardwood understory or midstory. RCWs can tolerate small numbers of overstory hardwoods or large midstory hardwoods at low densities found naturally in many southern pine forests, but they are not tolerant of dense hardwood midstories resulting from fire suppression. RCWs excavate roost and nest cavities in large living pines (i.e., 10 inches or greater in diameter at breast height). The cavity trees and the foraging area within 200 feet of those trees are known as a cluster. Foraging habitat is defined as pine and pine-hardwood (i.e., 50 percent or more of the dominant trees are pines) stands over 30 years of age that are located contiguous to and within one-half mile of the cluster.

If the proposed project area does not contain suitable nesting and/or foraging habitat as defined above, further consultation with the Service for this project will not be necessary. If suitable nesting and/or foraging habitat does exist, however, all suitable nesting habitat within a one-half mile radius from the project boundary should be carefully surveyed by a qualified biologist for the presence of RCW clusters in accordance with the RCW Recovery Plan (2003) survey protocol. We recommend that you provide this office with a copy of the survey report, which

should include the following details:

1. survey methodology including dates, qualifications of personnel, size of survey area, and transect density;
2. pine stand characteristics including number of acres of suitable nesting and/or foraging habitat, tree species, basal area and number of pine stems 10 inches or greater per acre, percent cover of pine trees greater than 60 years of age, species of dominant vegetation within each canopy layer, understory conditions and species composition (several representative photographs should be included);
3. number of active and inactive RCW cavity trees observed and the condition of the cavities (e.g., resin flow, shape of cavity, start-holes);
4. presence or absence of RCWs; and
5. topographic quadrangle maps which illustrate areas of adequate RCW nesting and/or foraging habitat, cluster sites, and cavity tree locations relative to proposed construction activities.

If no RCW clusters are found within a one-half mile radius of the project boundary, a request for our concurrence with your "not likely to adversely affect" determination, as well as the basis for your determination, should be included with the survey report. If we concur with that determination, no further consultation with this office will be necessary. If RCW clusters are found in the surveyed areas, however, then further consultation with this office will be required.

The proposed project may impact wetlands. For a complete jurisdictional wetland delineation of the proposed project, please contact Mr. Ken Moseley (601/631-5289) at the Vicksburg District Corps of Engineers (Corps). If the Corps determines that the proposed project is within their regulatory jurisdiction, official U.S. Fish and Wildlife Service comments will be provided in response to the corresponding Public Notice.

We appreciate the opportunity to provide comments in the planning stages of this proposed activity. If you need further assistance, please contact Angela Culpepper (337/291-3137) of this office.

Sincerely,



Russell C. Watson

Supervisor

Louisiana Field Office

cc: Corps of Engineers, Vicksburg, MS
LDWF, Natural Heritage Program, Baton Rouge, LA

State of Louisiana



RECEIVED JUL 21 2004

Dwight Landreneau
Secretary

Department of Wildlife & Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(225) 765-2800

Kathleen Babineaux Blanco
Governor

Name Chris M. Chambers
Company Shaw Environmental, Inc.
Street Address 4171 Essen Lane
City, State, Zip Baton Rouge, LA 70809
Project Cleco Power, LLC - Repowering Project
Rodemacher Power Station Unit No. 1
Boyce, Rapides Parish, LA
Date July 16, 2004
Invoice Number 04071605

Personnel of the Habitat Section of the Fur and Refuge Division have reviewed the preliminary data for the captioned project. Our database indicates a 1994 observation of a waterbird nesting colony in the surrounding area of your project. Rookeries can move from year to year and no current information is available on the status of these rookeries. No activity is permitted within 300 meters around rookeries during the breeding season which is generally March 15-July 15. We recommend that a qualified biologist inspect the proposed work site for the presence of nesting colonies during the nesting season. To minimize disturbance to colonial nesting birds, the following restrictions on activity should be observed:

- For colonies containing nesting wading birds (i.e., herons, egrets, night-herons, ibis, and roseate spoonbills, anhingas, and/or cormorants), all activity occurring within 1,000 feet of a rookery should be restricted to the non-nesting period (i.e., September 1 through February 15, depending on species present).
- For colonies containing nesting gulls, terns, and/or black skimmers, all activity occurring within 650 feet of a rookery should be restricted to the non-nesting period (i.e., September 16 through April 1, depending on species present).

We recommend that on-site contract personnel be informed of the need to identify colonial nesting birds and their nests, and should avoid affecting them during the breeding season. If you have any questions please call LNHP Zoologist Ines Maxit at 225-765-2820.

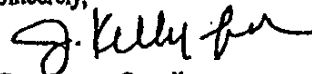
Our database also indicates a 1995 observation of osprey (*Pandion haliaetus*) in the area of your project. While no legal protection is afforded this species, it does hold a state rank of S2B/S3N and is considered imperiled /rare in Louisiana. Ospreys are found in central and southeastern Louisiana. The Osprey is rarely seen far from water, except during migration. It eats primarily fish, with occasional snakes, amphibians, and some smaller vertebrates. The breeding season begins in November and extends through early July. Ospreys typically build large stick nests both on living and dead trees, but also will use numerous man-made structures including telephone poles, wharf pilings, windmills, microwave towers, chimneys, and channel markers. Nests are often used in successive years. Clutch size is 1-4 (most often 3). Incubation lasts 4.5-5.5 weeks, usually mainly by female. Young first fly at 44-59 days, dependent on

parents for up to 6 weeks or more (less in north). First breeds usually at 3 years, sometimes at 4-5 years. Large numbers may nest in a relatively small area when food resources are adequate and nesting sites are plentiful. Osprey populations were declining rapidly in the mid-1900's, most likely due to the use of DDT and other pesticides. The accumulation of pesticides caused reproductive failures. With the banning of DDT and conservation programs (particularly, creating nesting platforms) for this species, Osprey populations are starting to increase. We anticipate no negative impacts on this species from your project.

In reviewing our database, no other rare, threatened, or endangered species or critical habitats were found within the areas of the captioned project that lie in Louisiana. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified sites within Louisiana's boundaries.

The Louisiana Natural Heritage Program has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. The Louisiana Natural Heritage Program requires that this office be acknowledged in all reports as the source of all data provided here. If you have any questions or need additional information, please call Louisiana Natural Heritage Program Data Manager Jill Kelly at (225) 765-2643.

Sincerely,



Gary Lester, Coordinator
Natural Heritage Program

EXPLANATION OF RANKING CATEGORIES EMPLOYED BY NATURAL HERITAGE PROGRAMS NATIONWIDE

Each element is assigned a single global rank as well as a state rank for each state in which it occurs. Global ranking is done under the guidance of NatureServe, Arlington, VA. State ranks are assigned by each state's Natural Heritage Program, thus a rank for a particular element may vary considerably from state to state. Federal ranks are designated by the U.S. Fish & Wildlife Service under the provisions of the Endangered Species Act of 1973.

FEDERAL RANKS (USESA FIELD):

LE = Listed Endangered

LT = Listed Threatened

PE = Proposed endangered

PT = Proposed Threatened

C = Candidate

PDL = Proposed for delisting

E (S/A) or T (S/A) = Listed endangered or threatened because of similarity of appearance

XE = Essential experimental population

XN = Nonessential experimental population

No Rank = Usually indicates that the taxon does not have any federal status. However, because of potential lag time between publication in the Federal Register and entry in the central databases and state databases, some taxa may have a status which does not yet appear.

(Rank, Rank) = Combination values in parenthesis = The taxon itself is not named in the Federal Register as having U.S. ESA status, however, all of its infraspecific taxa (worldwide) do have official status. The statuses shown in parentheses indicate the statuses that apply to infraspecific taxa or populations within this taxon. *THE SPECIES IS CONSIDERED TO HAVE A COMBINATION STATUS IN LOUISIANA*

(PS) = partial status = Status in only a portion of the species' range. Typically indicated in a "full" species record where an infraspecific taxon or population has U.S. ESA status, but the entire species does not. *THE SPECIES DOES NOT HAVE A STATUS IN LOUISIANA*

(PS, Rank) = partial status = Status in only a portion of the species' range. The value of that status appears because the entity with status does not have an individual entry in NatureServe. *THE SPECIES MAY HAVE A STATUS IN LOUISIANA*

GLOBAL ELEMENT RANKS:

G1 = critically imperiled globally because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extinction

G2 = imperiled globally because of rarity (6 to 20 known extant populations) or because of some factor(s) making it very vulnerable to extinction throughout its range

G3 = either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single physiographic region) or because of other factors making it vulnerable to extinction throughout its range (21 to 100 known extant populations)

G4 = apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery (100 to 1000 known extant populations)

STATE ELEMENT RANKS:

G5 = demonstrably secure globally, although it may be quite rare in parts of its range, especially at the periphery (1000+ known extant populations)

GH = of historical occurrence throughout its range; i.e., formerly part of the established biota, with the possibility that it may be rediscovered (e.g., Bachman's Warbler)

GU = possibly in peril range-wide, but status uncertain; need more information

G7 = rank uncertain. Or a range (e.g., G3G5) delineates the limits of uncertainty

GQ = uncertain taxonomic status

GK = believed to be extinct throughout its range (e.g., Passenger Pigeon) with virtually no likelihood that it will be rediscovered

T = subspecies or variety rank (e.g., G5T4 applies to a subspecies with a global species rank of G5, but with a subspecies rank of G4)

STATE ELEMENT RANKS:

S1 = critically imperiled in Louisiana because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extirpation

S2 = imperiled in Louisiana because of rarity (6 to 20 known extant populations) or because of some factor(s) making it very vulnerable to extirpation

S3 = rare and local throughout the state or found locally (even abundantly at some of its locations) in a restricted region of the state, or because of other factors making it vulnerable to extirpation (21 to 100 known extant populations)

S4 = apparently secure in Louisiana with many occurrences (100 to 1000 known extant populations)

S5 = demonstrably secure in Louisiana (1000+ known extant populations)

(B or N) may be used as qualifier of numeric ranks and indicating whether the occurrence is breeding or nonbreeding)

SA = accidental in Louisiana, including species (usually birds or butterflies) recorded once or twice or only at great intervals hundreds or even thousands of miles outside their usual range

SH = of historical occurrence in Louisiana, but no recent records verified within the last 20 years; formerly part of the established biota, possibly still persisting

SR = reported from Louisiana, but without conclusive evidence to accept or reject the report

SU = possibly in peril in Louisiana, but status uncertain; need more information

SX = believed to be extirpated from Louisiana

SZ = transient species in which no specific consistent area of occurrence is identifiable



MITCHELL J. LANDRIEU
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT
DIVISION OF ARCHAEOLOGY

ANGÈLE DAVIS
SECRETARY

PAM BREAU
ASSISTANT SECRETARY

August 18, 2004

REC'D AUG 31 2004

Mr. Chris Chambers
Shaw Environmental, Inc.
4171 Essen Lane
Baton Rouge, LA 70809

Re: Cleco Power LLC, Rodemacher Power Station
Unit Number 1 Repowering Project
Boyce, Rapides Parish, Louisiana

Dear Mr. Chambers:

This is in response to your letter dated June 14, 2004, concerning the above-referenced project. There are several recorded archaeological sites located within the Area of Potential Effects (APE) of this proposed project. No ground disturbance should be done within the boundaries of these sites (see enclosed maps and site forms). If these sites can be avoided, we have no objections to implementation of this project.

Should you have any questions concerning our comments, please contact Rachel Watson in the Division of Archaeology at (225) 342-8170.

Sincerely,

A handwritten signature in cursive script that reads "Pam Breau".

Pam Breau
State Historic Preservation Officer

PB:RW:s

Encl: as stated

STATE OF LOUISIANA
SITE RECORD FORM

Site Name: State Survey No: 16RA113
Other Site Designation: Parish: Rapides
Instructions for Reaching Site:
Go N on LA 1, 1.5 Mi from junction of LA 121. Site is on W side of LA 1, appx. 200m
from road on a small ridge
USGS Quad (Name, date, series): Boyce (1956) 15'
Quad No: 27-F quarter of the quarter of Section 24 Township 5N Range: 3W
UTM Coordinates: Zone: 15 Easting: Northing:
Geographical Coordinates: Latitude: Longitude:

PHYSICAL SETTING

Land Form: Ridge Slope:
Geologic Processes: Coastal plain Elev. ft AMSL:
Site Position: Overlooks cypress swamp
Near Water: Cypress swamp Flooding:
Soil Characteristics: Grey sand (cont)
Floral Communities: Mixed pine and hardwoods
Faunal Communities:
Other Potential Resources:
Nearest Known Site:

SITE DESCRIPTION

Site Size: Plan:
Orientation: E - W trending Stratigraphy:
Artifact Density: Artifact Distribution:
Cultural Features:
Prehistoric scatter to a depth of 25cm
Cultural Affiliation:
Neo-Indian (unknown)
Presumed Function: Camp

COLLECTIONS

Survey Meth: Subsurface testing
Assessment of Collecting Conditions:
Description of Material:
Prehistoric ceramics, chipped stone

CONDITIONS

Present Use:
Erosion or Disturbance: Surface disturbed by logging activity
Probable Future Destruction:

STATE OF LOUISIANA

CONTINUATION FORM

Site Name:

Site No: 16RA113

Soil Characteristics

overlain by 3 cm of humus and underlain by red clay

SITE EVALUATION

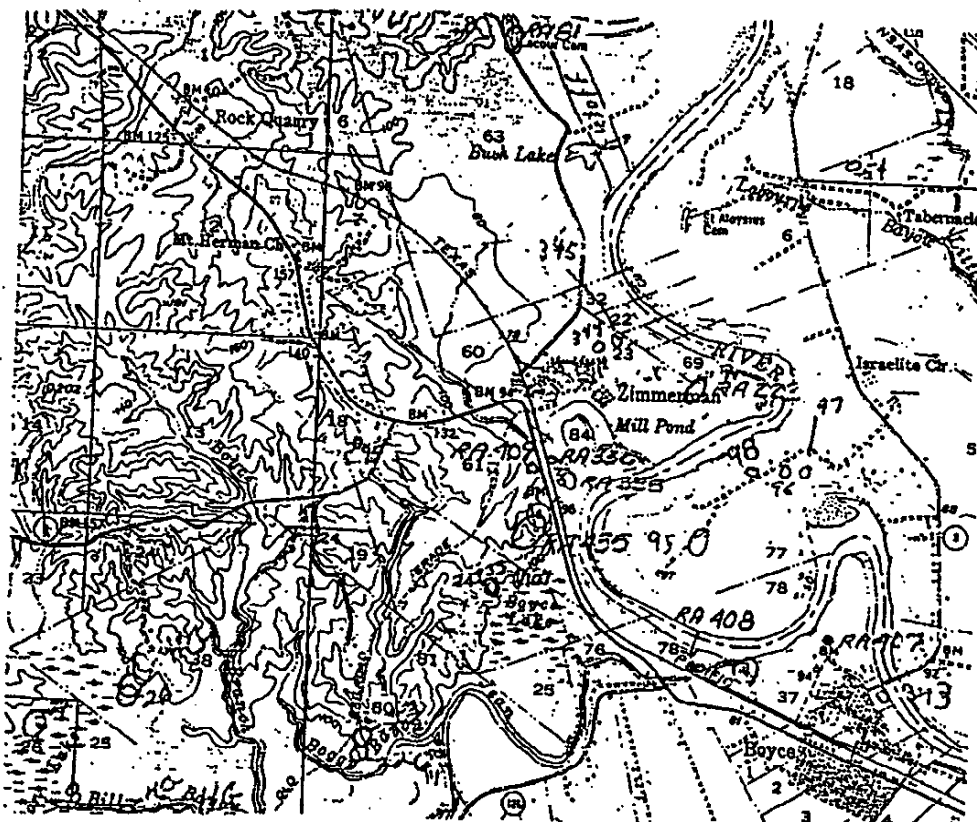
Site Number: 16RA113

Research Potential:

State/National Register Eligibility: Unknown

Recommendations:

QUAD MAP OF SITE AREA



RECORDS

Owner and Address:

CLECO

Tenant and Address:

Informants:

Prev. Invest:

Previous Collections and Availability:

References: Heartfield, et al (1978)

Photos and Maps:

Remarks:

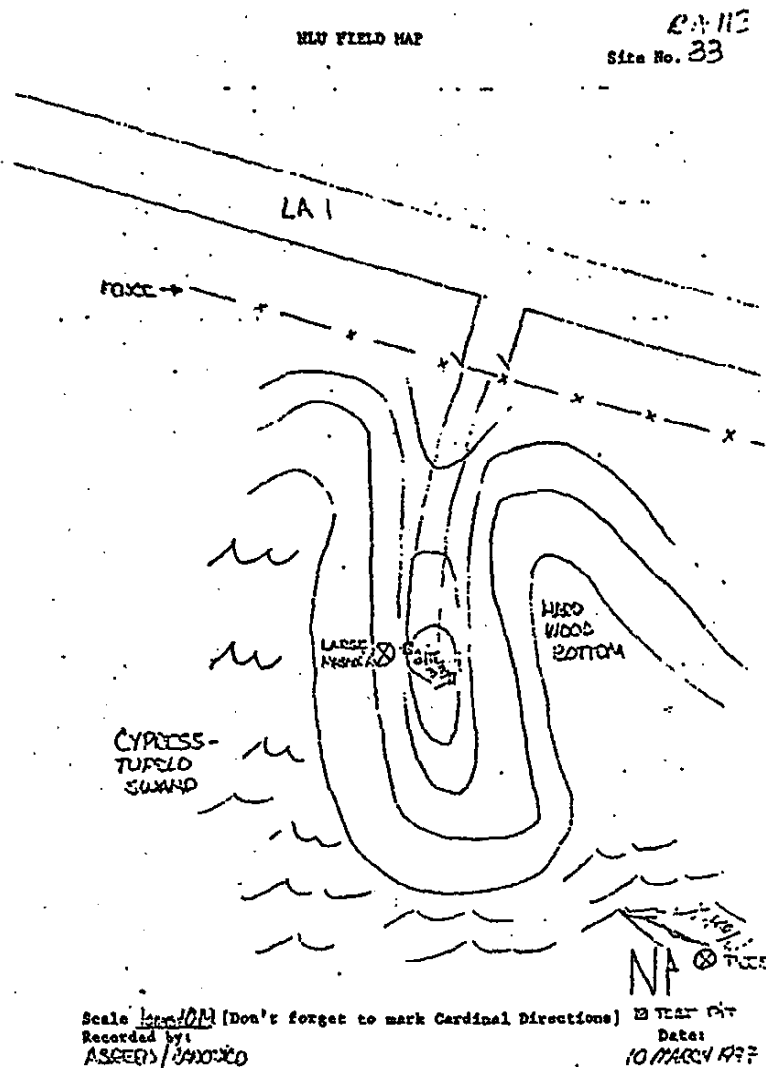
Recorder: Spencer, et al

Date: 3/10/77

STATE OF LOUISIANA
SITE SKETCH MAP FORM

Site Name:

Site No: 16RA113



Scale: 1 cm = 10 meters
 Drawn By: Asreen/Canonico
 Date: 3/10/77

STATE OF LOUISIANA

REFERENCE FORM

Site Name:

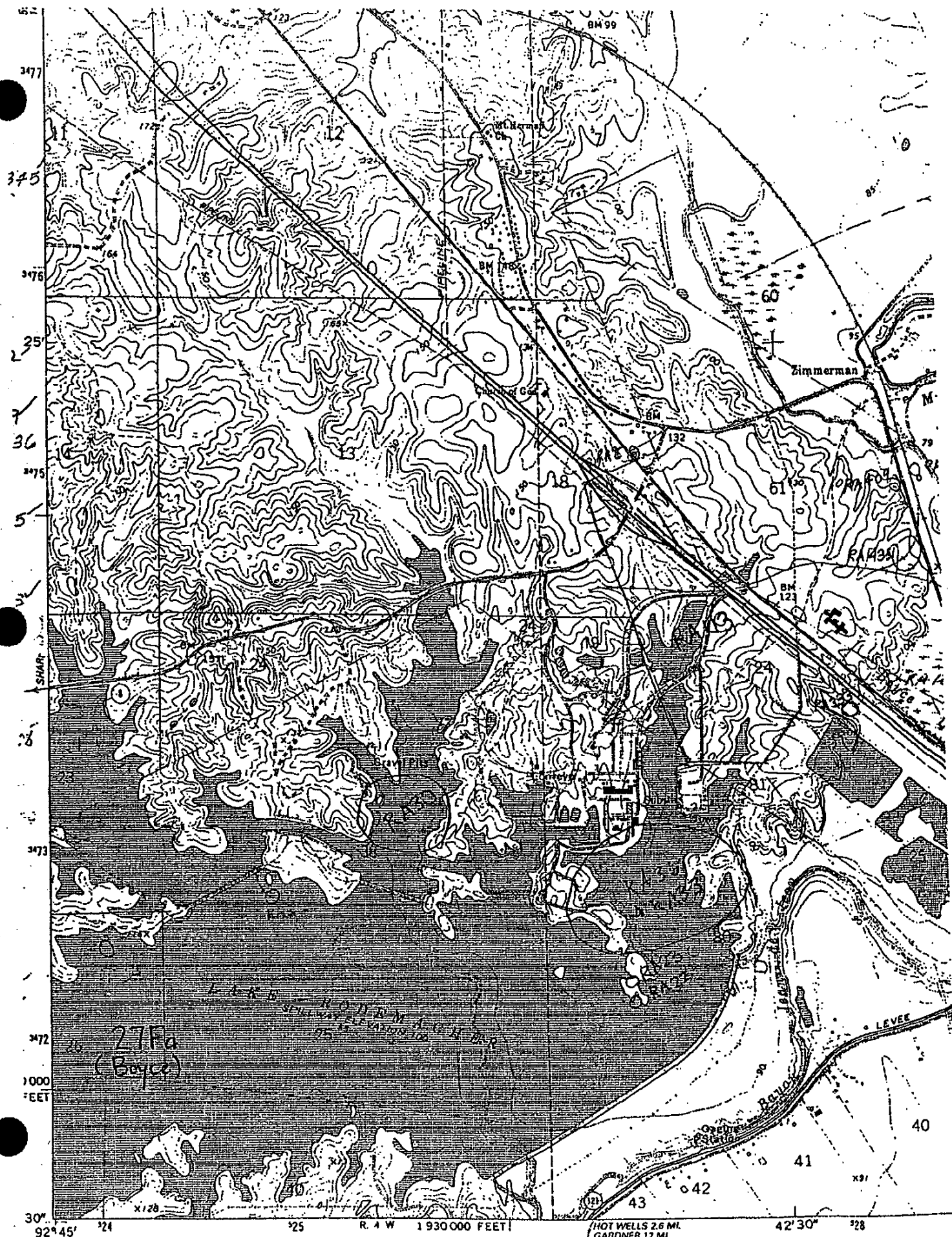
Site No: 16RA113

22-478

Heartfield, L., K. Hudson, G. R. Dennis Price,
S. Mitcham, H. E. Jackson, and G. S. Greene

1978

A cultural resource survey and evaluation
of the Opelousas to Shreveport portion
on the proposed North-South Expressway:
Phases I and II. 3 vol. Caddo, St. Landry,
Rapides, Evangeline, Avoyelles, Natchitoches,
DeSoto and Red River Parishes, Louisiana.
Unpublished report on file with the Division
of Archaeology and Historic Preservation,
Baton Rouge, LA



STATE OF LOUISIANA
SITE RECORD FORM

Site Name:
Other Site Designation:
Instructions for Reaching Site:

State Survey No: 16RA30
Parish: Rapides

USGS Quad (Name, date, series): Boyce (1956) 15'
Quad No: 27-F quarter of the quarter of Section 38 Township 5N Range: 4W
UTM Coordinates: Zone: 15 Easting: Northing:
Geographical Coordinates: Latitude: Longitude:

PHYSICAL SETTING

Land Form: Bench Slope:
Geologic Processes: Coastal plain Elev. ft AMSL: 90
Site Position: On small terrace between ridge and bottom, at foot of ridge
Near Water: Flooding:
Soil Characteristics: Susquehanna
Floral Communities:
Faunal Communities:
Other Potential Resources:
Nearest Known Site:

SITE DESCRIPTION

Site Size: 100' diameter Plan:
Orientation: Stratigraphy:
Artifact Density: Artifact Distribution: Scattered in spoil
Cultural Features:
Prehistoric scatter in spoil dirt piles west of site
Cultural Affiliation:
Meso-Indian/Archaic; Neo-Indian (unknown)
Presumed Function: Camp

COLLECTIONS

Survey Meth: Grab surface collection
Assessment of Collecting Conditions:
Description of Material:
Several plain clay-tempered sherds, 1 Gary base, chips, flakes, cores (very abundant),
1 Incised clay-tempered sherd

CONDITIONS

Present Use:
Erosion or Disturbance: Innundation
Probable Future Destruction:

SITE EVALUATION

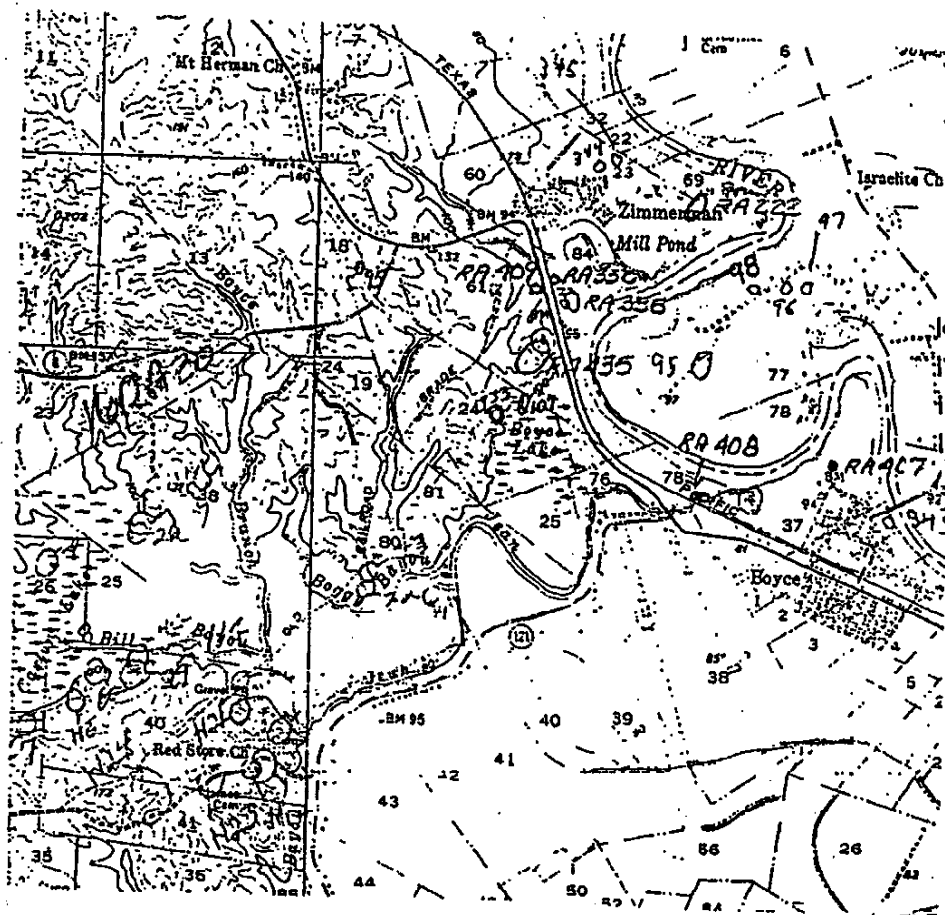
Site Number: 16RA30

Research Potential:

State/National Register Eligibility: Unknown

Recommendations:

QUAD MAP OF SITE AREA



RECORDS

Owner and Address:

Tenant and Address:

Informants:

Prev. Invest:

Previous Collections and Availability:

References: House, John (1973); HPG, Inc. (1981)

Photos and Maps:

Remarks:

Recorder: John House

Date: 1972

STATE OF LOUISIANA

REFERENCE FORM

Site Name:

Site No: 16RA30

22-321

House, John H.

1972

Archaeological salvage in the basin of Lake Rodemacher, Rapides Parish, Louisiana. Unpublished report on file at the Division of Archaeology and Historic Preservation, Department of Culture, Recreation and Tourism, Baton Rouge, LA

22-687

Heartfield, Price and Greene, Inc.

1981

"Prehistoric Inventory for the Energy Transportation Systems, Inc. Project." Prepared for Energy Transportation Systems, Inc.

STATE OF LOUISIANA
SITE RECORD FORM

Site Name:
Other Site Designation:
Instructions for Reaching Site:

State Survey No: 16RA33
Parish: Rapides

USGS Quad (Name, date, series): Boyce (1956) 15'
Quad No: 27-F quarter of the quarter of Section 80 Township 5N Range: 3W
UTM Coordinates: Zone: 15 Easting: Northing:
Geographical Coordinates: Latitude: Longitude:

PHYSICAL SETTING

Land Form: Knoll Slope:
Geologic Processes: Coastal plain Elev. ft AMSL:
Site Position: On high knoll, material concentrated on the crest of the ridge
Near Water: Flooding:
Soil Characteristics: Susquehanna
Floral Communities:
Faunal Communities:
Other Potential Resources:
Nearest Known Site:

SITE DESCRIPTION

Site Size: 100' x 300' Plan:
Orientation: Stratigraphy:
Artifact Density: Sparse Artifact Distribution: On ridge crest
Cultural Features:
 Prehistoric lithic scatter concentrated on the crest of the ridge
Cultural Affiliation:
 Neo-Indian (unknown)
Presumed Function: Camp

COLLECTIONS

Survey Meth: Grab surface collection
Assessment of Collecting Conditions:
Description of Material:
 1 incised sherd, 1 ovate biface, core chips

CONDITIONS

Present Use:
Erosion or Disturbance: Subject to wave action, eroding
Probable Future Destruction:

Date: 1972

STATE OF LOUISIANA

REFERENCE FORM

Site Name:

Site No: 16RA33

22-321

House, John H.

1972

Archaeological salvage in the basin of Lake Rodemacher, Rapides Parish, Louisiana. Unpublished report on file at the Division of Archaeology and Historic Preservation, Department of Culture, Recreation and Tourism, Baton Rouge, LA

22-687

Heartfield, Price and Greene, Inc.

1981

"Prehistoric Inventory for the Energy Transportation Systems, Inc. Project." Prepared for Energy Transportation Systems, Inc.

STATE OF LOUISIANA
SITE RECORD FORM

Site Name:

State Survey No: 16RA36

Other Site Designation:

Parish: Rapides

Instructions for Reaching Site:

At N end of dam at Lake Rodemacher

USGS Quad (Name, date, series): Boyce (1956) 15'

Quad No: 27-F quarter of the quarter of Section 80 Township 5N Range: 3W

UTM Coordinates: Zone: 15 Easting: Northing:

Geographical Coordinates: Latitude: Longitude:

PHYSICAL SETTING

Land Form: Knoll

Slope:

Geologic Processes: Coastal plain

Elev. ft AMSL:

Site Position: On S tip of hill at N end of the dam at Lake Rodemacher

Near Water: Lake Rodemacher

Flooding:

Soil Characteristics: Susquehanna

Floral Communities:

Faunal Communities:

Other Potential Resources:

Nearest Known Site:

SITE DESCRIPTION

Site Size:

Plan:

Orientation:

Stratigraphy:

Artifact Density:

Artifact Distribution: On S tip of hill

Cultural Features:

Prehistoric scatter

Cultural Affiliation:

Neo-Indian (unknown)

Presumed Function: Prehistoric (unknown)

COLLECTIONS

Survey Meth: Grab surface collection

Assessment of Collecting Conditions:

Description of Material:

1 sherds and small amount of lithic material. Local collectors reportedly have projectile points

CONDITIONS

Present Use:

Erosion or Disturbance: Unknown

Probable Future Destruction:

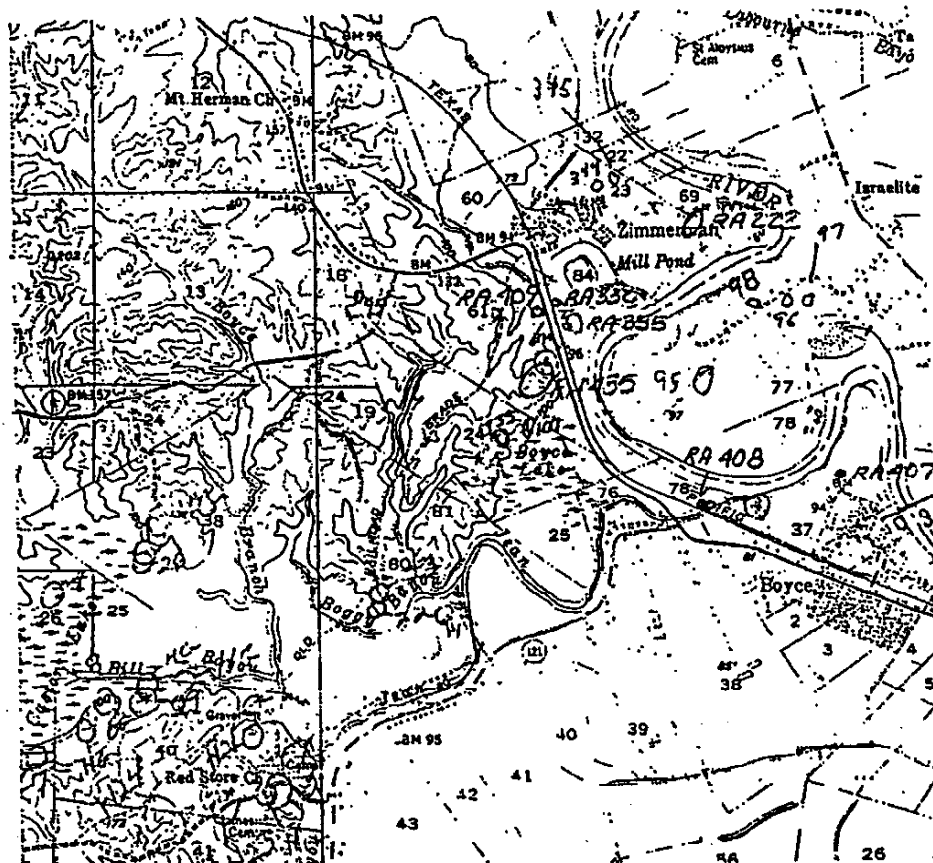
SITE EVALUATION

Site Number: 16RA36

Research Potential:

State/National Register Eligibility: Unknown

Recommendations: None

QUAD MAP OF SITE AREARECORDS

Owner and Address:

Tenant and Address:

Informants:

Prev. Invest:

Previous Collections and Availability:

References: Heartfield, Price and Greene, Inc. (1981)

Photos and Maps:

Remarks:

Recorder: John House

Date: 1972

STATE OF LOUISIANA

REFERENCE FORM

Site Name:

Site No: 16RA36

22-687

Heartfield, Price and Greene, Inc.

1981

"Prehistoric Inventory for the Energy
Transportation Systems, Inc. Project."
Prepared for Energy Transportation
Systems, Inc.



MITCHELL J. LANDRIEU
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT
DIVISION OF ARCHAEOLOGY

ANGÈLE DAVIS
SECRETARY

PAM BREAU
ASSISTANT SECRETARY

January 14, 2005

Mr. Chris M. Chambers
Shaw Environmental, Inc.
4171 Essen Lane
Baton Rouge, LA 70809

Re: Cleco Power LLC
Rodemacher Power Station Unit Number 1
Repowering Project
Boyce, Rapides Parish, Louisiana

Dear Mr. Chambers:

This is in response to your letter dated December 17, 2004, concerning the above-referenced project. As you are aware, Zimmerman Hill (16RA335), is an important archaeological site. Our office believes that further archaeological work will be required within the area of the barge unloading facility. Therefore, we are recommending a Phase I archaeological survey of this area. We realize that the area was previously surveyed in the past, however, archaeological testing has improved since this time.

I have enclosed a copy of our contracting archaeologists list and our Native American Contacts list for your use. If you have any further questions, please do not hesitate to contact Rachel Watson in the Division of Archaeology at (225) 342-8170.

Sincerely,

A handwritten signature in cursive script that reads "Pam Breau".

Pam Breau
State Historic Preservation Officer

PB:RW:s

Encls: as stated



Acadian

Ambulance & Air Med Services



P.O. Box 98000 • LAFAYETTE, LA • 70509-8000

EMPLOYEE
OWNED

AMBULANCE
DISPATCH
511
800-259-1111

ADMINISTRATION
337-291-3333
800-259-3333

BILLING
800-259-2222

June 20, 2005

Ray Sturdivant
Eagle Environmental Services, Inc.
18369 Petroleum Drive
Baton Rouge, LA 70809

Re: Cleco Power LLC
Rodemacher Power Station
AI 2922/GD-079-0390
Eagle Project No 01-00009

To Whom It May Concern:

We are in receipt of your request to respond as required by La. R.S. 30:2157 B acknowledging our ability to respond to a hazardous material incident at your facility located near the town of Lena in Rapides Parish, Louisiana. In response to that request Acadian Ambulance and Air Med Services has the ability to meet the response requirements of Section 473, Chapter 4 of the Life Safety Code of the National Fire Protection Association.

Should you have any questions or need additional information, please contact me at (318) 441-2262.

Sincerely,

Terry J. Arceneaux
Vice President - Operations

Boyce Volunteer Fire Department
P.O. Box 598
Boyce, Louisiana 71409

May 26, 2005

Clew Corporation

To Whom It May Concern:

The Boyce Volunteer Fire Department will respond to Rodemacher Power Station following notification of a fire at the plant. Should the need arise; assistance will be requested from those departments with whom the Boyce Volunteer Fire Department has previously arranged mutual assistance agreements.

~~Chief - Boyce Volunteer Fire Department~~

Wayne Phillips
Wayne Phillips



Rapides Regional Medical Center

Box 30301
211 Fourth Street
Alexandria, LA 71301-8354
Phone (318) 473-3150; FAX (318) 449-7575
www.rapidesregional.com

July 1, 2005

Ray Sturdivant
Project Manager
EAGLE Environmental Services, Inc
18369 Petroleum Drive
Baton Rouge, LA 70809

Dear Mr. Sturdivant,

This letter is to confirm that in reference to the accordance with R.S. 30:2157, Rapides Regional Medical Center Emergency Department is capable and willing to accept and treat any patients that are contaminated with hazardous materials.

Should you have any further question or require further information, please do not hesitate to contact me at (318)473-3848.

Sincerely,

Shawn LaCombe, RN
Nursing Director
Emergency Department